

*The Caltrans Injury and Illness Prevention Program*

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*Caltrans  
Safety  
Manual*

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July 1996

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## **INTRODUCTION TO THE CALTRANS SAFETY AND HEALTH MANUAL**

This Safety Manual provides an authoritative source of information to assist managers, supervisors, and employees in their efforts to conduct Caltrans business in a safe and healthy manner consistent with applicable law, rule, policy, or regulation. This manual contains information and guidance about maintaining a safe and secure work environment for employees and visitors, including persons with disabilities, and the public, that is free from violence, threats, harassment, and intimidation.

This manual represents the basis for the Caltrans Injury and Illness Prevention Program (IIPP) as required by State law contained in Division 5 of the Labor Code and Title 8 of the California Code of Regulations, as codified in Section 3203 of the General Industry Safety Orders (GISO).

The policies, procedures, and work practices discussed in this manual are based on safety and health standards found in Labor Code requirements, Cal-OSHA regulations, Uniform Building Code standards, State Administrative Manual (SAM) guidelines, and/or related law, rule, or policy.

This manual represents the most current information about Departmental policies, procedures, and work practices. It is important to understand that it is impossible to adopt or set standards and procedures which will apply to every work setting or operation that may arise. In situations where unusual work conditions exist, or where hazards may be present, additional precautions and/or procedures may be designed or required to ensure safety. Individuals should consult with the District or Headquarters Safety and Health Offices about questions on safety and health issues and operating procedures that are not included in this manual.

The Caltrans Safety Manual is not intended to be a single source document and does not provide all of the details and information necessary to fulfill the requirements of the Caltrans Injury and Illness Prevention Program described in Section 3203 of the General Industry Safety Orders (GISO).

The user will have to consult with and research other Caltrans reference materials including code of safe operating practices, Material Safety Data Sheets (MSDS), Director and Deputy Directives, emergency action plans, training catalogs, the Guide to Employee Conduct and Discipline, and other documents for specific subject matter details if the information is not specifically covered in this manual.

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## **CALTRANS SAFETY AND HEALTH MANUAL**

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# **ATTENTION MANAGERS AND SUPERVISORS**

## **THIS CALTRANS SAFETY MANUAL HAS BEEN ISSUED TO :**

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( WRITE YOUR NAME ON THIS LINE )

## **THIS 1996 EDITION OF THE SAFETY MANUAL IS YOUR COPY OF THE CALTRANS INJURY AND ILLNESS PREVENTION PROGRAM**

Managers and supervisors are responsible for the implementation and maintenance of the Department's Injury and Illness Prevention Program (IIPP), and providing a safe and secure work environment for employees and visitors, including persons with disabilities, and the public, that is free from violence, threats, harassment, and intimidation.

The following represents the minimum requirements of the Department's Safety Program:

- 1. Supervisors must have meetings with their employees to discuss safety and health issues, workplace security/violence, provisions for persons with disabilities, emergency action plan procedures, and other safety concerns:**
  - a. Office supervisors shall have safety meetings at least quarterly.
  - b. Field supervisors shall have safety meetings at least every ten (10) working days.
- 2. Supervisors shall conduct periodic facility safety inspections of their work areas. These areas include general office areas, field offices, laboratories, shops, and adjacent work areas. The following types of inspections are to be conducted:**
  - a. **Informal** - In the course of normal activities, inspect daily to detect and reduce physical and environmental hazards, including a review of warning signs of potential workplace security/violence. Document the findings and take corrective action.
  - b. **Formal** - Conduct a complete walk-through inspection of all work areas at least annually at all fixed worksites. Document the findings and take corrective action.
  - c. **Special** - Performed in response to reports of accidents, or near-miss accidents, unsafe conditions, possible health risks, new products, substances, and equipment. Document findings and take corrective action.
- 3. Supervisors are responsible to investigate and document all occupational injuries, illnesses, and actual or alleged acts of workplace violence:**
  - a. To identify contributing factors.
  - b. To prevent further occurrences.

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## **CALTRANS SAFETY AND HEALTH MANUAL**

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**4. Supervisors must provide training and maintain records of the training covering:**

- a. The hazards basic to all places of employment.
- b. The hazards unique to each job assignment.
- c. The recognition and prevention of workplace security/violence.
- d. Use and knowledge of emergency action plans.

**5. Supervisors are responsible to enforce all safety and health laws, rules, policies, and regulations by:**

- a. Counseling and educating employees when appropriate.
- b. Initiating appropriate disciplinary action when employees violate safety and health laws, rules, and policies, or fail to comply with workplace security/violence practices.

**6. Supervisors are responsible to keep records on safety and health matters:**

- a. Maintain and have records accessible on all safety and health issues.
- b. Maintain records on all worksite inspections and training programs for one (1) year.

***The following information should be followed as the correct manner in which to respond to inquiries about the Department's Safety Program.***

**WHERE AND WHAT IS THE CALTRANS INJURY AND ILLNESS PREVENTION PROGRAM ?**

Because Caltrans is made up of a varied and complex workforce, the **Department's Injury and Illness Prevention Program** is not available in a single source document. The basis of the Safety Program is in this manual. Other portions of the Safety Program can be found in other functional area program manuals and publications, codes of safe operating practices, Material Safety Data Sheets (MSDS), and other reference materials including training catalogs, emergency action plans, and the Guide to Employee Conduct and Discipline.

**HOW TO RESPOND TO AN INQUIRY FROM A Cal-OSHA INSPECTOR.**

Whenever a Cal-OSHA Inspector visits a worksite he/she usually will ask an employee (sometimes the first person seen) if they can identify and locate the **Department's Injury and Illness Prevention Program (IIPP)**.

The inspector will ask the question to ascertain if the employee knows about the **Injury and Illness Prevention Program**. The inspector wants to know if the supervisor is in compliance with Cal-OSHA regulations. The six (6) items listed above represent the Cal-OSHA requirements.

To assist you in the performance of your duties, read the following page titled "SAFETY AND HEALTH IN THE WORKPLACE", sign your name at the top, remove it from the manual, discuss it with your employees, then post it in a conspicuous place for all employees in your work area to see and read.

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## **CALTRANS SAFETY AND HEALTH MANUAL**

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# SAFETY AND HEALTH IN THE WORKPLACE

Date posted: \_\_\_\_\_

At this work location/office \_\_\_\_\_ is the person responsible to  
(Manager/supervisor, write your name on this line)

carry out the Caltrans Injury and Illness Prevention Program, as outlined below, and as described in the Caltrans Safety Manual. I have copies of the following documents available for review to help explain safety and health policies:

- Caltrans Safety Manual (1996 Edition)
- Caltrans Construction Program Manual
- Code of Safe Operating Practices
- Caltrans Guide to Employee Conduct and Discipline
- Other Resource Documents (Specify): \_\_\_\_\_
- Caltrans Maintenance Program Manual
- Caltrans Surveys Manual
- Training Plan Guidelines

The following represents the minimum requirements of the Department's Safety Program. As the supervisor, I will do the following to fulfill my responsibilities toward maintaining a safe and healthy work environment:

**1. I will meet with my employees to discuss safety and health related issues, workplace security/violence, provisions for persons with disabilities, emergency action plan procedures, or other safety concerns:**

- a. I will have safety meetings with my office workers at least quarterly.
- b. I will have safety meetings with my field workers at least every ten (10) working days.

Whenever safety or health concerns are brought to my attention, either at these meetings or at other times, I will investigate and take appropriate corrective action.

**2. I will conduct the following types of periodic facility safety inspections in our work area:**

- a. **Informal** - I will inspect daily to detect and reduce physical and environmental hazards, review warning signs of potential workplace security/violence concerns. I will document the findings and take corrective action.
- b. **Formal** - I will conduct a complete walk-through inspection (include items in Informal above) at least annually at every fixed worksite. I will document the findings and take corrective action.
- c. **Special** - I will request special inspections in response to reports of accidents, unsafe conditions, possible health risks, new products, substances, equipment, or when an incident occurred involving potential and/or actual act of violence or security concerns. I will arrange to have copies of documented findings and take corrective action.

**3. It is my responsibility to investigate and document all occupational injuries, illnesses, and actual or alleged acts of workplace security/violence:**

- a. To identify contributing factors.
- b. To prevent further occurrences.

**4. I will provide training, or arrange for training, and will maintain records of the training covering:**

- a. The hazards basic to all places of employment.
- b. The hazards unique to each job assignment.
- c. The recognition and prevention of workplace security/violence concerns.
- d. Use and knowledge of emergency action plans.

**5. As your supervisor, I am responsible to enforce all safety and health laws, rules, policies, and regulations by:**

- a. Counseling and educating my employees when appropriate.
- b. Initiating appropriate disciplinary action when my employees violate safety and health laws, rules, and policies or fail to comply with workplace security/violence practices.

**6. I am responsible to keep records on safety and health matters:**

- a. Maintain and have records accessible on all safety and health issues.
- b. Maintain records on all worksite inspections and training programs for one (1) year.

I may delegate some of the tasks outlined above to others, but I am responsible to ensure that all of the tasks are carried out as described. That responsibility cannot be delegated. Please contact me if you have any questions or concerns about safety and health matters in the workplace. You may also contact our local District or Head-quarters Safety and Health Office for information about safety and health issues.

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## **CALTRANS SAFETY AND HEALTH MANUAL**

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# CALTRANS SAFETY AND HEALTH MANUAL REVISIONS

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## RECORD OF REVISIONS

<b>MANUAL CHANGE NUMBER</b>	<b>MANUAL CHANGE DATE</b>	<b>SUBJECT</b>	<b>CHAPTER, SUBJECT, AND /OR NUMBER</b>	<b>DATE INSERTED INITIALS</b>
M81-17	2-28-81	NEW SAFETY MANUAL FIRST EDITION 1981	NEW SAFETY MANUAL FIRST EDITION 1981	2-28-81
M82-26	7-27-82	NEW SECTION; VEHICLE SAFETY	1-130 VEHICLE SAFETY	7-27-82
M87-1	1-20-87	REVISION: VEHICLE BACKING POLICY	2-10 VEHICLE BACKING POLICY	1-20-87
M87-2	5-5-87	NEW SAFETY MANUAL SECOND EDITION 1987	NEW SAFETY MANUAL SECOND EDITION 1987	5-5-87
M88-1	6-1-88	REVISION; HEALTH AND ADVISORY FACE AND EYE PROTECTION RESPIRATOR PROTECTION FIRST AID KIT RESPIRATOR HANDBOOK	1-30.4 ADVISORY COMMITTEE 3-20 FACE AND EYE PROTECTION 3-30 RESPIRATORY PROTECTION 6-30 FIRST AID KIT 15-00 RESPIRATORY HANDBOOK	6-1-88
M92-1	5-7-92	NEW SAFETY MANUAL THIRD EDITION MARCH 1992	NEW SAFETY MANUAL THIRD EDITION MARCH 1992	5-7-92
M96-1	7-10-96	NEW SAFETY MANUAL FOURTH EDITION JULY 1996	NEW SAFETY MANUAL FOURTH EDITION JULY 1996	7-10-96
M97-01	1-30-97	REVISIONS: VARIOUS	UPDATES CHAPTERS: 1,5,6,8,9,10,12,15,17,18,19, and INDEX	1-30-97
M98-01	5-27-98	REVISIONS: VARIOUS	UPDATES CHAPTERS: 1,2,6,and 19	5-27-98
M98-02	6-25-98	REVISIONS: VARIOUS	UPDATES CHAPTERS: 5,8,9,11,12,and index	6-25-98
M98-03	7-24-98	REVISIONS : VARIOUS	UPDATES CHAPTERS: 7,10,12,13,14,17,18,19,and index	7-24-98
M00-01	12-21-00	REVISIONS : VARIOUS	UPDATES CHAPTERS: 4,5,8,9,10,12,13,14,16,17,18,19,20, and index	12-21-00

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MANUAL CHANGE NUMBER	MANUAL CHANGE DATE	SUBJECT	CHAPTER, SUBJECT, AND /OR NUMBER	DATE INSERTED INITIALS



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# CHAPTER 1

## **THE MANAGEMENT STRUCTURE AND OPERATING DETAILS OF THE CALTRANS SAFETY PROGRAM**

### **THE CALTRANS INJURY AND ILLNESS PREVENTION PROGRAM**

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# CHAPTER 1

## **THE MANAGEMENT STRUCTURE AND OPERATING DETAILS OF THE CALTRANS SAFETY PROGRAM**

### **THE CALTRANS INJURY AND ILLNESS PREVENTION PROGRAM**

#### **1.00 INTRODUCTION**

This chapter introduces and describes the operating details of Department's Injury and Illness Prevention Program.

#### **1.01 PURPOSE**

The purpose of this chapter is to explain the roles and responsibilities of the Director, Deputy Directors, District Directors, Service Center Directors, Program Managers, and the Department's Safety and Health staff.

It also explains the responsibilities of managers, supervisors, and employees who are required to maintain a safe, secure, and healthful work environment. Finally, it describes the composition and function of the various safety and health committees.

#### **1.02 POLICY STATEMENT**

It is Caltrans policy to conduct its business, provide services, and to construct and maintain facilities in the safest possible manner consistent with applicable policy, procedure, or work practice, and promote through an effective injury and illness prevention program, a safe, healthful, and secure work environment for employees and visitors, including persons with disabilities, that is free from violence, threats, harassment, and intimidation, and protects the public from harm in connection with its operations.

#### **1.03 LEGAL REQUIREMENTS FOR A WRITTEN INJURY AND ILLNESS PREVENTION PROGRAM**

The Caltrans Injury and Illness Prevention Program is a fulfillment of State law as required by S.B. 198 enacted by the State Legislature in July 1991. The legislation is codified in Division 5 of the Labor Code and in Title 8 of the California Code of Regulations.

Division 5, Section 6401.7 of the Labor Code mandates that every employer shall have a written injury and illness prevention program. Further, Section 6401.7 requires that every employer will provide a safe and healthful workplace for their employees.

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The Labor Code also requires that every employer enforce safety and health policies and practices and take appropriate disciplinary action whenever safety and health policies and practices are violated.

Title 8 of the California Code of Regulations represents the expressed social public policy of the State of California as set forth in the State Constitution and represents State law in securing safety in all places of employment. Within Title 8, Section 3203 of the General Industry Safety Orders (GISO) contains specific details about implementing and maintaining an effective Injury and Illness Prevention Program. (Title 8 of the California Code of Regulations is also known as the Cal-OSHA Regulations.)

These regulations require that every employer have a written injury and illness prevention program which includes: identification of the person responsible for implementation and enforcement of safety and health policies and procedures at each worksite and/or office; evaluation of workplace hazards and conducting periodic inspections; correction of unsafe or unhealthy conditions in a timely manner; safety training and periodic safety meetings; enforcement procedures for violations of safety regulations; and appropriate record keeping procedures.

As an employer, Caltrans management supports an injury and illness prevention program and remains committed to providing a safe, healthful, and secure work environment for employees and the public, including persons with disabilities, that is free from violence, threats, harassment, and intimidation, and protects the public from harm in connection with its operations.

EDITOR'S NOTE:

This manual is not a single source document and does not provide all of the details and information necessary to fulfill the requirements of the State law, and does not contain all of the essential elements of the entire written Caltrans Injury and Illness Prevention Program.

The user will have to consult with other Departmental manuals or reference materials, including training catalogs, Code of Safe Operating Practices (CSOP), Caltrans Guide to Employee Conduct and Discipline, Cal-OSHA regulations, Labor Code requirements, Uniform Building Code regulations, the State Administrative Manual (SAM), and/or related law, rule, or policy for additional information.

Manual users should contact the Departmental safety staff whenever they need assistance in interpretation and/or implementation of any stated policy or practice discussed in this manual, or issues and operating procedures that are not included in this manual.

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## 1.04 HIGHLIGHTS OF THE Cal-OSHA REGULATIONS

The following items are the six (6) major elements of the State law as required in Section 3203 of the General Industry Safety Orders (GISO).

For managers and supervisors to be in substantial compliance with the Cal-OSHA regulations and the Department's Injury and Illness Prevention Program they shall:

- Schedule meetings with employees to discuss safety and health issues, workplace security, and emergency action plans:
  - At least quarterly for office workers.
  - At least every ten (10) working days for field employees.
- Conduct periodic worksite safety inspections of general office areas, field offices, laboratories, shops, and adjacent work areas, etc., by conducting the following types of inspections:
  - Informal - In the course of normal duties, inspect daily to detect and eliminate physical and environmental hazards, and visually review warning signs of potential workplace violence, write reports, and document findings and corrective actions taken.
  - Formal - Conduct walk-through inspections (include all items covered in Informal above) at least annually at all fixed worksites, write reports, and document findings and corrective actions taken.
  - Special - Performed in response to reports of unsafe conditions, health risks, new products, substances, equipment, or when advised that an incident occurred involving potential and/or actual act of violence, write reports, and document findings and corrective actions taken.
- Investigate and document all injuries, illnesses, and actual or alleged acts of workplace violence:
  - To identify contributing factors.
  - To prevent further occurrences.
- Provide training and maintain records of the training covering:
  - The hazards basic to all places of employment.
  - The hazards unique to each job assignment.
  - The recognition of workplace security hazards.
  - Use of emergency action plans.
- Enforce all safety and health laws, rules, and policies by:
  - Counseling and educating employees when appropriate.
  - Initiating appropriate disciplinary action when employees violate safety laws, rules, policies, or fail to comply with workplace security practices.
- Keep records on safety and health matters:
  - Maintain and have records accessible on all safety and health issues.
  - Maintain records on all worksite inspections and training programs for at least one (1) year.

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**1.05 DIRECTOR OF TRANSPORTATION**

The Director of the Department of Transportation is charged with the responsibility of promoting safety and health policies, procedures, and work practices through an effective Injury and Illness Prevention Program as required by statute. The Director provides program direction through the Corporate and District staff to ensure a safe, healthy, and secure work environment exists for employees and the public, including persons with disabilities, that is free from violence, threats, harassment, and intimidation for its employees, and that the public is protected from harm in connection with Caltrans operations.

**1.06 DEPUTY DIRECTORS, ASSISTANT DIRECTORS, SERVICE CENTER DIRECTORS, AND PROGRAM MANAGERS**

The Deputy Directors, Assistant Directors, Service Center Directors, and Program Managers are responsible to direct their managers, supervisors, and employees to comply with all elements of the Caltrans Injury and Illness Prevention Program, and enforce through appropriate counsel, education, and discipline all safety and health policies, procedures, and work practices.

Managers in these positions are responsible to ensure that a safe, healthy, and secure work environment exists for employees and the public, including persons with disabilities, that is free from violence, threats, harassment, and intimidation of its employees, and that the public is protected from harm in connection with Caltrans operations.

Managers are responsible to assess safety and health program policy issues, review and analyze the effectiveness of the Department's Safety and Health Program. They are also responsible to ensure that safety and health issues are routinely discussed by all levels of management at staff meetings, or other appropriate meetings.

Service Center Directors and Program Managers may establish a Safety and Health liaison staff to coordinate their program with the Headquarters Office of Safety and Health.

They may develop, adopt, and publish safety and health policies and procedures consistent with Caltrans Injury and Illness Prevention Program goals and/or Cal-OSHA regulations to fit operational needs.

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**1.07 DISTRICT DIRECTORS OF TRANSPORTATION**

The District Directors of Transportation are responsible to direct their managers, supervisors, and employees to comply with all elements of the Caltrans Injury and Illness Prevention Program and enforce through appropriate counsel, education, and discipline all safety and health policies and procedures.

District Directors are responsible to ensure that a safe, healthy, and secure work environment exists for employees and the public, including persons with disabilities, that is free from violence, threats, harassment, and intimidation for its employees, and that the public is protected from harm in connection with Caltrans operations.

District Directors are responsible to assess safety and health program policy issues, and to review and analyze the effectiveness of the Department's safety and health program. They are also responsible to ensure that safety and health issues are routinely discussed by all levels of management at staff meetings, branch chief meetings, or other appropriate meetings.

They may develop, adopt, and publish safety and health policies and procedures consistent with Caltrans Injury and Illness Prevention Program goals, and/or Cal-OSHA regulations, to fit operational needs.

District Directors shall establish and maintain appropriate accident prevention committees and a Safety and Health Office and staff.

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### **1.08 SUPERVISORY RESPONSIBILITY FOR SAFETY AND HEALTH POLICIES, PROCEDURES, AND WORK PRACTICES**

Supervisors (See Special Note on Page 1-11) are responsible to conduct Caltrans business in the safest possible manner consistent with Departmental policies, procedures, and work practices. They are responsible to promote a safe, healthful, and secure work environment for employees and visitors, including persons with disabilities, that is free from violence, threats, harassment, and intimidation, and protects the public from harm in connection with its operations.

The following items summarize some of the most frequent safety and health requirements supervisors are expected to accomplish:

- Supervisors are the responsible persons to implement and maintain an effective Injury and Illness Prevention Program. (This includes, at a minimum, having a copy of the Department's Safety Manual available for reference purposes and for review by employees.)
- Supervisors shall conduct safety meetings with their employees to discuss safety and health matters, including provisions for persons with disabilities, workplace violence and security, specific workplace hazards, and encourage open discussions on employee concerns.
- Supervisors shall provide a safe and secure work environment that has zero tolerance for violence, threats, harassment, and intimidation in the workplace.
- Supervisors shall consistently monitor the actions of their staff, including subordinate supervisors, and whenever any incident relating to workplace violence occurs, it shall be dealt with immediately.

NOTE: Managers and supervisors must recognize that while behavioral and personal problems associated with workplace violence justify corrective action, they often indicate the need for professional counseling through the Employee Assistance Program (EAP).

Counseling can be provided to those employees who desire such intervention to reduce the short- and long-term effects of emotional and/or physical trauma. Supervisors shall assist employees in arranging for EAP counseling services.

See Chapter 6 - WORKPLACE VIOLENCE for more information.



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- Supervisors shall report all incidents of workplace violence to their supervisor, security guard, California Highway Patrol (CHP), Building Manager, or other appropriate authority immediately.

NOTE:

INJUNCTIONS: Whenever an employee has a temporary restraining order (TRO) in force to control personal contact and/or access by another person, they are requested to discuss the existence and terms and conditions of the TRO with their supervisor. The supervisor will endeavor to assist the employee in complying with the terms and conditions of the restraining order, including discussing enforcement details of the TRO with building security personnel and other appropriate management personnel.

VICTIM ASSISTANCE: As conditions may warrant, employees may be entitled to help in the form of counseling services, and other relief through victims assistance programs.

Contact the District or Headquarters Safety and Health offices for information.

- Supervisors shall conduct periodic safety inspections of all worksites to identify and correct unsafe conditions and unsafe acts, and document the results.
- Supervisors shall investigate and document all occupational injuries, illnesses, or acts of workplace violence, and identify corrective action that will prevent further occurrences.
- Supervisors shall ensure that all employees receive training to cover hazards basic to all places of employment, and specific training to cover hazards that are unique to each employee's job assignment.
- Supervisors shall ensure that each employee understands the assigned task, is provided with the necessary equipment, and follows all safety and health policies, procedures, and work practices.
- Supervisors are responsible to enforce all safety and health laws, rules, and policies, and shall initiate corrective action for employees who violate safety and health laws, rules, and policies.

- 
- Supervisors who fail to enforce safety and health policies, procedures, regulations, laws, or rules shall be disciplined in accordance with the provisions described in the “Caltrans Guide to Employee Conduct and Discipline.”
  - Supervisors shall be free from the effects of medication, controlled substances, alcohol, or the complications arising from illness or injury which might impair their judgment and/or ability to perform their work safely and efficiently.
  - Supervisors who observe an employee who appears to be unable to perform his/her assigned duties and have a concern about the safety of the employee or others, are responsible to prohibit that employee from continuing to work.

NOTE:

An employee who exhibits such behavior should be prohibited from working until a determination of the reason for the employee's behavior is made, or until a medical evaluation of the employee's fitness can be completed.

- Supervisors are responsible to designate a responsible person-in-charge when they are away from the workplace.
- Supervisors shall ensure that employee safety and health issues are discussed and assessed annually at the time of issuing an Individual Development Plan/Performance and Appraisal Summary, and/or at the time supervisors discuss employee probationary reports.

Supervisors with employees who regularly work in field assignments, and/or who may occasionally take a field trip shall also:

1. Discuss hazards associated with working near highway traffic.

Have pre-job discussions with employees to discuss hazards unique to their job assignment, including the hazards associated with working-on-foot, or performing pedestrian type activities, and working near highway traffic.

- 
2. Discuss increasing likelihood for drug-and alcohol-impaired drivers on the highways.

Talk to employees to improve their awareness of the increasing incidence of drug- and alcohol-impaired drivers on the highways, and instruct them to make frequent (facing traffic when possible) visual observations of moving traffic during their work activities.

**SPECIAL NOTE:**

**FOR DESIGNATED “MANAGER” AND “SUPERVISOR”**

1. Any reference to “**supervisor**” in this manual always includes first-line supervisor, second-line supervisor, and/or other persons of responsible charge in the chain-of-command. “Supervisor” includes designated Manager (M) and Supervisor (S).
2. *Because of the variety of civil service classifications used by the Department, some classifications and some working titles, such as “Resident Engineer”, may not be designated as “S” or “Supervisory”, but are still the responsible person-in-charge.*

*Even though some working titles may not be designated “supervisor”, the individual is still responsible to carry out all elements of the Department’s Injury and Illness Prevention Program, because they are charged with the overall responsibility for a project, which includes enforcing safety and health policies, procedures, and work practices, and protecting employees, visitors, and the public from harm in connection with our operations.*

*Other persons with similar working titles are equally responsible to carry out all of the elements of the Department’s Injury and Illness Prevention Program.*

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**1.09 EMPLOYEE RESPONSIBILITY FOR FOLLOWING SAFETY AND HEALTH POLICIES, PROCEDURES, AND WORK PRACTICES**

All employees are responsible to conduct Caltrans business in the safest possible manner by following all policies, procedures, and safe work practices.

The following items summarize some of the most common safety and health requirements employees are expected to comply with:

- Employees are expected to report to work mentally and physically capable of performing all of their assigned duties without jeopardizing the safety and health of themselves, other employees, or the public.
- Employees are expected to attend safety meetings to discuss safety and health matters, workplace security and workplace violence concerns, and provide feedback to their supervisors.
- Employees shall follow proper work practices and help maintain a safe and secure work environment by complying with the Department's policy of zero tolerance for violence, threats, harassment, and intimidation in the workplace.
- Employees shall report all incidents of workplace violence to their supervisor, security guard(s), California Highway Patrol (CHP), Building Manager, or other appropriate authority immediately.

NOTE:

INJUNCTIONS: Whenever an employee has a temporary restraining order (TRO) in force to control personal contact and/or access by another person, they are requested to discuss the existence and terms and conditions of the TRO with their supervisor. The supervisor will endeavor to assist the employee in complying with the terms and conditions of the restraining order, including discussing enforcement details of the TRO with building security personnel and other appropriate management personnel.

VICTIM ASSISTANCE: As conditions may warrant, employees may be entitled to help in the form of counseling services, and other relief through victims assistance programs.

Contact the District or Headquarters Safety and Health offices for information.

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- Employees are expected to conduct daily safety inspections of their worksites to identify and correct workplace hazards, and/or if unable to correct notify their supervisor.
  - Employees shall do everything reasonably necessary to protect their own safety and health and that of others by complying with all occupational safety and health policies, procedures, work practices, laws, rules, or regulations to ensure safety and security for all employees, including persons with disabilities.
  - Employees shall promptly report all injuries, illnesses, unsafe conditions, and unsafe acts, to their supervisor immediately, or at least before the end of the work shift.
  - Employees shall use equipment properly and carefully, and follow all safety and health policies, procedures, and work practices, as directed by his/her supervisor, and ask for instructions or assistance if they are unable to understand the assigned task.
  - Employees who fail to comply with safety and health policies, procedures, regulations, laws, or rules shall be disciplined in accordance with the provisions described in the "Caltrans Guide to Employee Conduct and Discipline."
  - Employees shall be free from the effects of medication, controlled substances, alcohol, or the complications arising from illness or injury which might impair their judgment and/or ability to perform their work safely and efficiently.
  - Employees are responsible to notify their supervisor of any personal medical condition or prescribed medication which might impair their ability to perform their assigned duties. Employees should also report to their supervisor any behavior by another employee which reasonably indicates that they are not fit-for-duty.

**1.10 RESPONSIBLE PERSON IN CHARGE****(For Field and Office Work Locations)**

It has long been a Departmental practice and policy that whenever two or more employees are assigned to work together, someone be placed in charge.

This responsibility is usually assigned to the designated supervisor based upon his/her civil service classification. However, there may be occasions when the supervisor is unavailable to direct the work for short periods, such as during an emergency.

During such absences the supervisor is required to designate an individual to be in charge. Before leaving the worksite, the supervisor shall identify who is in charge, and what steps should be taken while he/she is away from the worksite.

It is especially important to have someone placed in charge, during the absence of the regular supervisor, in field operations where the safety of visitors and public is a consideration.

If the supervisor leaves the worksite (office or field location) and does not designate someone, the leadperson or senior member of the work group on-site will be deemed to be in charge.

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**1.11 DEPARTMENTAL SAFETY AND HEALTH OFFICER AND STAFF**

The Chief, Office of Safety and Health is the Departmental Safety and Health Officer. This position is charged with the responsibility to provide advice and counsel to the Director, Deputy Directors, Service Center Directors, Program Managers, District Directors, and the Caltrans Departmental Safety and Health Advisory Committee.

The Departmental Safety and Health Officer is also responsible to:

- organize and direct a support staff to monitor the implementation and maintenance of the Department's Injury and Illness Prevention Program, and related policy, procedures, and work practices;
- provide advice to managers, supervisors, and employees regarding interpretation and implementation of Cal-OSHA regulations, Labor Code provisions, Uniform Building Code regulations, and other applicable safety and health laws, rules, or standards;
- provide guidance to District Safety and Health Officers, the Construction Safety Coordinators, Maintenance Managers and Supervisors, and functional program safety liaison personnel about the Department's Injury and Illness Prevention Program;
- develop and/or recommend adoption of new and/or revised safety and health policies, procedures, and work practices; review, monitor, and recommend safety and health training programs;
- visit worksites and review operating techniques to identify unsafe work practices and unsafe work conditions and recommend appropriate corrective action;
- conduct safety and health reviews of field and office supervisors operations, records, and files to ensure compliance with the Department's Injury and Illness Prevention Program;
- conduct independent investigations of personal injury accidents and motorized equipment/vehicle accidents, as appropriate; and,
- enforce safety and health laws and policies if supervisors fail to carry out their assigned responsibilities and order cessation of work if an activity, materials, equipment, process, or environmental condition presents an imminent or serious hazard to employees' safety.

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**DEPARTMENTAL SAFETY AND HEALTH OFFICER AND STAFF, continued**

The following list represents an overview of safety program activities provided by the Headquarters Office of Safety and Health staff:

**OCCUPATIONAL SAFETY**

- hazardous materials
- confined spaces
- respirator safety
- lighting
- chemical and pesticide
- ventilation
- hearing and noise exposure

**FACILITY SAFETY**

- machine and tool safety
- ergonomics
- facility inspections
- electrical safety
- personal protective equipment
- vehicle and equipment safety

**ENVIRONMENTAL HEALTH**

- biological hazards
- first aid care
- communicable diseases
- indoor air quality

**EMERGENCY PLANNING**

- emergency action plans
- evacuation procedures for persons with disabilities
- fire safety
- workplace violence
- earthquake preparedness

**HEALTH PROMOTION**

- worksite health screening
- nutrition and fitness
- health education
- medical self-care

**LIAISON**

- Caltrans program, service centers, offices and units
- Department of General Services
- Cal-OSHA
- other agencies

**INFORMATION SERVICES**

- newsletters
- new products evaluation
- Governor's Employee Safety Award
- Departmental safety advisory committee
- accident investigation, analysis, and prevention
- Safety Information Management System (SIMS) accident and injury data base
- safety manual
- safety incentive awards
- safety training programs



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## 1.12 DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF

The District Safety and Health Officer provides guidance and direction to District managers, supervisors, and employees on safety and health issues, and interpretation and implementation of State law as contained in the Cal-OSHA standards, Labor Code provisions, Uniform Building Code regulations, and other applicable safety and health laws, rules, or standards; and are responsible to:

- organize and direct a support staff that monitors and oversees the implementation and maintenance of the Department's Injury and Illness Prevention Program, policy, procedures, and work practices by all managers and supervisors to ensure a safe and secure work environment for employees and the public, including persons with disabilities, that is free from violence, threats, harassment, and intimidation in all District facilities, worksites, and operations;
- provide assistance to managers and supervisors on how to encourage and/or enforce employees to follow safety and health laws, policies, procedures, and work practices to ensure compliance with the Department's Injury and Illness Prevention Program);
- conduct investigations of personal injury accidents and motorized equipment/vehicle accidents, review and classify accidents, and assign "preventability", document findings and prepare reports for management as needed;
- enforce safety and health laws and policies, if supervisors fail to carry out their assigned responsibilities, and order cessation of work if an activity, materials, equipment, process, or environmental condition presents an imminent or serious hazard to employees' safety;
- independently conduct, and provide guidance and direction to District Construction Safety Coordinators and Maintenance managers and supervisors covering **Operational Reviews** and **Safety and Health Reviews** as described below:

### **Operational Reviews:**

The Operational Review process is part of the Department's Injury and Illness Prevention Program and is designed to examine field operating techniques and procedures to ensure they are conducted in compliance with Departmental policy, procedures, and work practices, and Cal-OSHA regulations.

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**DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, continued****Operational Reviews**, continued

Operational Reviews cover typical field type work activities and work practices such as: lane closures, lane closure signs, placing cones, pilot car operations, vehicle parking, use of barrier or shadow vehicles, workers on foot, truck-mounted signs, flagging, etc., which are based on policies, procedures, and work practices contained in other Departmental manuals and resource material and are not specifically discussed or explained in this manual.

Detailed written instructions, charts, drawings, and illustrations covering most field-type work activities and work practices can be found in the Maintenance Program Manual, Construction Program Manual, Surveys Program Manual, other program specific manuals, various Code(s) of Safe Operating Practices (CSOP), emergency action plans, Material Safety Data Sheets (MSDS), Standard Plans, and other Departmental reference materials.

District Safety and Health Officers and their staff have full authority to conduct Operational Reviews in order to ensure uniform compliance with Departmental safety and health policies, procedures, work practices, and Cal-OSHA regulations.

**Safety and Health Reviews:**

The Safety and Health Review process is essentially a retrospective look at how well the Department's safety program has been implemented and maintained by the supervisor and his/her chain-of-command.

The safety and health review is designed to examine both office and field supervisors records to verify their compliance with the Department's Injury and Illness Prevention Program as described in this Safety Manual.

The following Sub-section titled “**CONDUCTING SAFETY AND HEALTH REVIEWS**” provides detailed instructions covering this review process.

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**DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, continued****CONDUCTING SAFETY AND HEALTH REVIEWS**

- **Purpose and Scope**

The purpose of conducting a safety and health review is to evaluate compliance with Departmental policies, procedures, and work practices. The review will substantiate the supervisor's effectiveness in implementing and maintaining an effective injury and illness prevention program.

The reviews primary focus is to provide feedback to management regarding whether desired results are effectively achieved and to assist supervisors in carrying out their responsibilities.

The safety and health review provides the framework for the overall evaluation of the success of the supervisor and his/her chain-of-command in implementing and maintaining the Department's Injury and Illness Prevention Program.

The review also provides a systematic method of making objective analysis, appraisals, recommendations, and comments on selected activities contained in Departmental and Cal-OSHA safety standards.

The safety and health review is designed to:

- examine the supervisor's records;
- verify the supervisor's compliance with the Department's Injury and Illness Prevention Program;
- provide on-going audit assurances that supervisor is fulfilling his/her responsibilities; and
- provide direction to supervisors and serve as a basis for future evaluations and audits.

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**DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, continued**

- **Minimum Items for Review**

To ensure compliance with the Department's Injury and Illness Prevention Program the safety and health review shall include, at a minimum, the following requirements:

1. A review to ensure the supervisor has a copy of the Caltrans Safety Manual. This review is also made to ensure that employees know who is responsible for the safety program in their area.  
Cal-OSHA § 3203(a)(1) GISO.
2. A review of safety records to ensure that safety meetings are scheduled and conducted on a regular basis and documented.  
Cal-OSHA § 3203(a)(3) GISO, and § 1509(e) CSO.
3. A review of safety records to ensure that facility inspections and operation reviews are scheduled and conducted on a regular basis and documented. Cal-OSHA § 3203(a)(4) GISO.
4. A review of safety records to ensure that occupational injury accidents and illnesses are investigated and documented.  
Cal-OSHA § 3203(a)(4)(A)(5) GISO.
5. A review of training records to ensure that employees are trained about hazards basic to all places of employment, and trained about hazards unique to each job assignment, and records maintained.  
Cal-OSHA § 3203(a)(7) GISO.
6. A discussion with the supervisor about employees following policies, procedures, and safe work practices, and a discussion about taking appropriate disciplinary action whenever employees or supervisors violate safety and health laws, rules, and policies.  
Cal-OSHA § 3203(a)(2) GISO.
7. A review of records to ensure that all safety and health matters are maintained in accessible files and that records of inspections and training are maintained for 1-year.  
Cal-OSHA § 3203(b)(1) GISO.

NOTE:

Safety and health reviews are not intended to be limited to a "paper review" only. The review person(s) is encouraged to conduct an actual inspection as indicated in Item 3. above. Refer to Chapter 3 - SAFETY INSPECTIONS of this manual for details. The review process should also be used as an opportunity to assist local supervisors in carrying out the Department's safety program.

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**DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, continued**

- **Safety and Health Review Guidelines**

When District Safety and Health Officers or staff conduct a review they shall:

1. Keep in mind that the purpose of the review is to assist the supervisor by providing input and information, lending expertise and knowledge, not to criticize.
2. Be impartial and focus on gathering and analyzing information and making observations to help the supervisor manage his/her program.
3. Not assume that the supervisor has set up or maintains his/her records in the same manner as the Safety staff person. Variations meeting the criteria are allowable.
4. Have a person familiar with the record/file system accompany the Safety staff, if necessary, to answer questions during the review.
5. Ask for input during the review. Try to resolve questions during the review, rather than going back to review a second time.
6. Keep focused on the purpose of the review and not on peripheral non-safety items.
7. Document the observed deficiencies clearly and accurately.
8. Prioritize the deficiencies, focus on serious and imminent hazards first:
  - a. set priority for correcting the deficiencies.
  - b. set reasonable dates for correction of deficiencies, and
9. Prepare a written report.
10. Send the report to the first-line supervisor containing your findings with instructions or information about how to correct any identified deficiency. The report should contain a sequential presentation of the findings and procedures to carry out the recommendations.

Copies of the written report may also be sent to the second-line supervisor, or others, as may be deemed appropriate.

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**DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, continued**

- **Type and Frequency of Safety and Health Reviews**

District Safety and Health Officers shall conduct the reviews as follows:

**TYPE 1. INFORMAL REVIEWS - all worksites** - periodically with no fixed schedule.

This type of review is best conducted when the District Safety and Health Officers or staff visits a worksite. The review should always be made in cooperation and with knowledge of the supervisor.

Informal reviews can be conducted with minimum documentation. All serious deficiencies must be documented along with the steps recommended to correct the situation and/or deficiency. Minor deficiencies may be documented if not immediately corrected.

**TYPE 2. FORMAL REVIEWS - field worksites** - periodic with fixed schedule.

This type of review is conducted at all permanent field worksites (Maintenance, Construction, Surveys, etc.) at State-owned, rented, and leased facilities at least once every two (2) years.

**TYPE 2. FORMAL REVIEWS - office worksites** - periodic with fixed schedule.

This type of review is conducted at all permanent office worksites, including State-owned, rented, and leased facilities at least once every two (2) years.

Formal reviews must be documented. The documentation must include specific identification of an observed deficiency, recommended corrective action, and a schedule by which the deficiency will be corrected.

**TYPE 3. SPECIAL REVIEWS - all worksites** - periodically with no fixed schedule.

This type of review is conducted whenever a supervisor invites a Safety and Health Officer or staff to their facility or worksite; whenever a serious occupational injury or illness occurs; a serious or life threatening hazard is alleged to exist; and/or an unsafe condition is alleged to exist during a work activity, or upon written or verbal request of the supervisor or manager of the facility or worksite.

Special reviews must be documented. The documentation must include specific identification of an observed deficiency, recommended corrective action, and a schedule by which the deficiency will be corrected.

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**DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, continued**

- **Notification of Findings and Recommendations**

The purpose of notifying the supervisor about the results of a review is to help them take corrective action to fulfill their responsibilities and serve as a guide for the future.

Whenever a review reveals a deficiency, the supervisor shall be notified in writing. The notification shall list each item and explain what must be done to correct the deficiency.

For example, if a deficiency is found covering one of the items listed under sub-section **Minimum Items for Review** (page 1-23 above), the supervisor should be informed about these special requirements, and told in which chapter and/or section of the Safety Manual the requirement is described.

When the review does not reveal any deficiencies, the supervisor shall also be notified in writing. Supervisors shall receive appropriate recognition for work practices that promote safety and health and workplace security.

- **Correcting Deficiencies**

Supervisors are responsible to initiate appropriate corrective action as soon as possible following notification of a deficiency. Serious and imminent hazards require immediate corrective action.

(It is recognized that supervisors do not always have authority or the ability to correct deficiencies. Supervisors must, however, initiate appropriate action to arrange for others to correct the deficiencies.)

After the initial review, the District Safety and Health Officer shall conduct a follow-up review on each identified deficiency that is documented in the report.

This follow-up process is done to ensure that each deficiency, or other safety-related item, is corrected in a timely manner considering their severity.

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**1.13 DEPARTMENTAL SAFETY AND HEALTH ADVISORY COMMITTEE**

The Caltrans Departmental Safety and Health Advisory Committee consists of six (6) permanent members:

- The permanent chairperson is the Administrative Service Center Director.

The other five (5) permanent Committee members are:

- Program Manager for the Maintenance Program,
- Program Manager for the Construction Program,
- Program Manager for the Traffic Operations Program,
- Chief Counsel for the Legal Program, and
- a District Director on a rotating basis.

The Chief, Office of Safety and Health is the Committee Secretary.

The purpose of the Committee is to:

- Provide direction to the Chief, Office of Safety and Health regarding the Department's Injury and Illness Prevention Program (IIPP), Workers' Compensation Program, and risk management and loss control.
- Provide direction to the Chief, Office of Safety and Health to ensure that safe and secure work environments free from violence, threats, harassment, and intimidation are maintained for employees and the public, including persons with disabilities, at all Caltrans facilities.
- Ensure that all legislation concerning the Department's Safety and Health Program is monitored, and ensure that the provisions of enacted legislation are appropriately implemented.
- Review and act on the recommendations offered by the Departmental Accident Review Team (DART). (See note below.)

The Committee does not operate on a pre-scheduled basis, but rather acts proactively as an advisory board when issues arise, on a meeting-by-meeting basis, and/or as agenda or critical items may dictate.

NOTE: See Chapter 19 - SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS OR FATALITY, for an explanation of the Departmental Accident Review Team (DART) process.



**1.14 DISTRICT ACCIDENT PREVENTION COMMITTEES**

Each District Director may establish a District Accident Prevention Committee. The Committee should be comprised of management, supervisors, and employees.

The District Director or designee should appoint a chairperson who may serve on a rotating basis. The District Safety and Health Officer shall be a permanent member and acts as co-chairperson. Members of the District Safety and Health staff shall provide assistance to committee members as required.

The Committee should meet on a regular basis to:

- provide direction in maintaining the Department's Injury and Illness Prevention Program.
- review selected motor vehicle and personal injury accidents in order to analyze the circumstances surrounding the accidents and recommend new and/or improved work practices to prevent their recurrence. (See NOTE below.)
- review, evaluate, and recommend safety and health improvement ideas to management.
- solicit input from employees, employee organizations, and other interested parties regarding safety and health issues.
- ensure that the District employee safety and health programs are communicated effectively to and complied with by all employees.
- give recognition in the form of awards, certificates, etc., for individual and group safety achievements.

NOTE:

The District Accident Prevention Committee does not review accidents for the purpose of determining their classification or preventability as discussed in Chapter 18 - MOTOR VEHICLE ACCIDENTS. Determining preventability is the responsibility of the second-line supervisor and the District Safety Officer. See Section 1.12 DISTRICT SAFETY AND HEALTH OFFICERS AND STAFF, for details.

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**1.15 ESTABLISHING SAFETY AND HEALTH COMMITTEES**

Service Center Directors and Program Managers may establish additional safety and health operating and/or advisory committees similar to District accident prevention committees.

They may also develop other applicable safety programs to maintain and/or improve employee safety and health and promote the Caltrans Injury and Illness Prevention Program, provided such committees and programs complement existing programs and committees.

Contact the Headquarters Office of Safety and Health for assistance if a committee or an advisory group is being considered.

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# CHAPTER 2

## SAFETY MEETINGS

### HOW TO SCHEDULE, CONDUCT, AND DOCUMENT SAFETY MEETINGS

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JULY 1996

## SAFETY MEETINGS

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### **SAFETY MEETINGS**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 2

## SAFETY MEETINGS

### HOW TO SCHEDULE, CONDUCT, AND DOCUMENT SAFETY MEETINGS

#### 2.00 INTRODUCTION

This chapter explains the requirements for supervisors to conduct safety meetings with their employees to discuss occupational safety and health issues.

Conducting regularly scheduled safety meetings is a mandatory requirement of the Department's Injury and Illness Prevention Program and Cal-OSHA regulations.

#### 2.01 PURPOSE

The purpose of this chapter is to provide instructions to ensure that:

- safety meetings are scheduled and conducted on a regular basis:
  - > office supervisors shall have quarterly safety meetings
  - > field supervisors shall have safety meetings every 10-working days;
- safety meetings are documented;
- employee attendance is recorded;
- reports of alleged unsafe conditions, unsafe acts, and other deficiencies are documented, investigated, and corrected;
- a copy of the written record is posted or available for review;
- second-line supervisors monitor subordinate supervisors to ensure compliance with these requirements; and
- copies of safety meeting reports are retained by the first-line supervisor for one (1) year.

#### 2.02 POLICY STATEMENT

Supervisors shall schedule, conduct, and document safety meetings with their employees to discuss occupational safety and health issues, including provisions for a safe and secure work environment by promoting safe work practices that have zero tolerance for violence, threats, harassment, and intimidation.

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## 2.03 SAFETY MEETING REQUIREMENTS

Section 3203(a)(3) of the General Industry Safety Orders requires; "**. . . a system for communicating with employees on matters relating to occupational safety and health . . .**", in all places of employment. Further, Section 1509(e) of the Construction Safety Orders (CSO) specifically requires safety meetings every ten (10) working days.

It has long been a Departmental policy and practice that "... a system for communicating with employees on matters relating to occupational safety and health ... ", is expected to be accomplished by supervisors through regularly scheduled safety meetings with their employees.

- FOR OFFICE RELATED WORK ACTIVITIES

Section 3203(a)(3) of the General Industry Safety Orders (GISO), which applies to the general employment population of the Department, including office workers, states in part:

Every employer must have ". . . a system for communicating with employees on matters relating to occupational safety and health . . .", in all places of employment.

It is Caltrans policy that supervisors in office related work locations:

**Shall schedule, conduct, and document safety meetings with their employees at least quarterly.**

- FOR FIELD RELATED WORK ACTIVITIES

Section 1509(e) of the Construction Safety Orders (CSO), which applies to all field related work locations; i. e., construction, maintenance, bridge repair, bridge painters, surveys, field traffic operations, drilling crews, or similar field work activities, states in part:

"Supervisory employees shall conduct "toolbox" or "tailgate" safety meetings, or equivalent, with their crews at least every 10 working days to emphasize safety."

It is Caltrans policy that supervisors in field related work locations:

**Shall schedule, conduct, and document safety meetings with their employees every ten (10) working days**

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## 2.04 RESPONSIBILITY FOR SAFETY MEETINGS

NOTE: Any reference to “**supervisor**” in this manual always includes first-line supervisor, second-line supervisor, and/or other persons of responsible charge in the chain-of-command. “**Supervisor**” includes designated Manager (M) and Supervisor (S).

The supervisor is a key person in the Caltrans Injury and Illness Prevention Program. The supervisor must create and maintain interest in safety because he/she is responsible to translate management policy into action.

Supervisors are responsible to ensure that employees know and comply with Departmental safety and health policy, procedures, and work practices, and should do everything within their control to assure a safe workplace for their employees.

Supervisors shall discuss safety and health matters, including provisions for persons with disabilities, and encourage open discussions on employee concerns, including a safe and secure work environment by promoting safe work practices that have zero tolerance for violence, threats, harassment, and intimidation.

Supervisors are encouraged to take every opportunity to exchange ideas on safety and accident prevention with employees, to commend them for their efforts to do the job safely, and to invite them to discuss safety suggestions. Supervisors should review and consider all employee suggestions and implement or arrange to implement whenever possible.

If a safety suggestion is beyond the ability of the first-line supervisor, they should arrange to have the suggestion reviewed by a higher authority for consideration and implementation.

Whenever employees are introduced to new assignments or activities, the supervisor should take the opportunity to have a discussion with the employees before the work begins. In this way, the supervisor can instruct employees on how to recognize hazards, discuss specific procedures for protecting themselves from injury, and discuss first aid procedures in the event of an injury. Supervisors should document these discussions as part of the regularly scheduled safety meeting.

Supervisors should also ensure that safety and health issues are discussed and assessed at least annually at the time of issuing an Individual Development Plan/Performance and Appraisal Summary, during probation evaluation period, or anytime an employee appears not to be following well-known and accepted safety policies, procedures, and work practices.

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**2.05 TAILGATE SAFETY MEETINGS FOR FIELD PERSONNEL**

In compliance with Section 1509(e) of the Construction Safety Orders (CSO), all employees who are regularly assigned to construction, maintenance, surveys, field traffic operations, drilling crews, etc., shall attend a "tailgate" safety meeting at least every ten (10) working days. Attendance of these safety meetings is mandatory.

The scheduled date, time, and location of the tailgate safety meeting shall be announced as early as possible before the meeting in order to ensure that the maximum number of employees can attend.

During the meetings, employees should be encouraged to discuss safety and health issues and inform the supervisor of any safety or health concerns that are perceived to be a workplace hazard and/or a potential workplace hazard. Employees should be encouraged to make suggestions about safety training or to request specific safety training for him/herself.

In addition to the every 10-day safety meeting requirement, supervisors shall conduct safety meetings with employees when they are first hired, or when a new process, chemical, or procedure is introduced or when a new or previously unrecognized hazard is identified.

NOTE:

Employees should be encouraged to discuss "close call" incidents. It should be understood that "close call" incidents are essentially accidents which didn't result in contact, injury, or damage. Close call incidents are indicators that the operation or activity being performed/conducted may require a change or adjustment to prevent or eliminate the likelihood of injury or damage.

**2.06 SAFETY MEETINGS FOR OFFICE PERSONNEL**

In compliance with Section 3203(a)(3) of the General Industry Safety Orders (GISO), all employees in office work settings shall attend safety meetings at least quarterly.

The scheduled date, time, and location of the quarterly safety meeting shall be announced as early as possible before the meeting to ensure the maximum number of employees can attend.

During the meetings, employees should be encouraged to openly discuss safety and health issues and inform the supervisor of any safety or health concerns perceived to be workplace hazards. Employees should be encouraged to make suggestions about safety training or to request specific safety training for themselves.



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Supervisors shall conduct safety meetings with employees when they are first hired, or when a new process, chemical, or procedure is introduced or when a new or previously unrecognized hazard is identified.

## **2.07 HOW TO DOCUMENT SAFETY MEETINGS**

- Using the FORM PM-S-0110 - SAFETY MEETING REPORT

The Form PM-S-0110 is a Caltrans form designed to document safety meetings.

Part one of the form includes an Action and Distribution section identifying specific routing procedures. The form also includes space to record the date, location, names of the employees who attended, and the topics discussed. The form also has space to record information about suggestions for correcting unsafe conditions, unsafe work practices, other safety and health concerns, and supervisor's comments.

A sample of Form PM-S-0110, SAFETY MEETING REPORT is shown at the end of this chapter.

## **2.08 MONITORING THE SAFETY MEETING PROCESS**

Second-line supervisors are responsible to monitor safety meetings conducted by their subordinate supervisors. Monitoring procedures shall include reviewing the meeting reports (Form PM-S-0110, SAFETY MEETING REPORT), and taking appropriate action to ensure that alleged unsafe conditions and unsafe acts are corrected in a timely manner. To ensure that safety meeting reports are monitored:

- The first-line supervisor is responsible to send the signed original of the safety meeting report to his/her second-line supervisor for review.
- The second-line supervisor is responsible to review the safety meeting report for content and scope, corrective action, then sign the original report and return it to first-line supervisor.

### NOTE:

District Safety and Health Officers and Service Center Safety Liaison personnel may, at their option, arrange to have the Safety Meeting Reports routed to them for review.

**2.09 CORRECTING DEFICIENCIES**

All alleged unsafe conditions and/or unsafe acts that are reported shall be investigated and corrected in a timely manner.

The supervisor should determine if the alleged unsafe condition or unsafe act can be handled routinely, or if the alleged unsafe condition is acute and requires immediate action.

If the recommended corrective action is beyond the ability of the first-line supervisor, the second-line supervisor shall be consulted and an appropriate action plan shall be jointly developed to ensure that alleged or actual unsafe condition(s) are corrected in a timely manner.

If the problems and/or deficiencies identified are beyond the ability or scope of responsibility of the first or second-line supervisor, he/she shall take necessary action to inform appropriate levels of management to correct the problem.

If the supervisor is not available, employees shall contact another supervisor or the District or Headquarters Safety and Health Office for assistance.

**2.10 ROUTING SAFETY MEETING REPORTS**

After the safety meeting is completed, the first-supervisor shall follow the Action and Distribution section of the form:

1. First-line supervisor conducts meeting, completes, and signs form.
2. First-line supervisor retains and posts one copy.
3. First-line supervisor sends original to second-line supervisor for review.
4. Second-line supervisor reviews, signs original, and returns to first-line supervisor to file.
5. Additional Routing - To: .....

The supervisor shall post a copy of the completed report in a conspicuous place near the work area for employees to read. The posted copy should be replaced by the next scheduled safety meeting report.

**2.11 RETENTION SCHEDULE**

Supervisors are required to maintain all documentation covering safety meetings for at least one (1) year.

**SAFETY MEETING REPORT****FORM PM-S-0110**

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION  
**SAFETY MEETING REPORT**  
PM-S-0110 (REV. 10/1999)

## ACTION AND DISTRIBUTION:

- ☐ 1. First-line supervisor conducts meeting, completes, and signs form.  
☐ 2. First-line supervisor retains and posts one copy.  
☐ 3. First-line supervisor sends original to second-line supervisor for review.  
☐ 4. Second-line supervisor reviews, signs original, and returns to first-line supervisor to file.  
☐ 5. Additional routing to:

*Note: See Chapter 2,  
Safety Meetings, in the  
Caltrans Safety Manual  
for details.*

MEETING DATE	OFFICE/CREW/PROJECT NAME	COST CENTER/PROJECT NUMBER
--------------	--------------------------	----------------------------

ATTENDANCE-SIGNATURE OF EMPLOYEES (Add additional sheets if required)


SAFETY TOPICS DISCUSSED


# Sample

SAFETY SUGGESTIONS/COMMENTS


FIRST-AND/OR SECOND-LINE SUPERVISOR'S COMMENTS


FIRST-LINE SUPERVISOR SIGNATURE	DATE	SECOND-LINE SUPERVISOR SIGNATURE	DATE
---------------------------------	------	----------------------------------	------

SUGGESTED TOPICS FOR DISCUSSION

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> Safe work habits                      | <input type="checkbox"/> Maintenance, Chapter 8   | <input type="checkbox"/> Respirator safety | <input type="checkbox"/> Warning garments |
| <input type="checkbox"/> Safe work conditions                  | <input type="checkbox"/> Traffic control/flagging | <input type="checkbox"/> Confined spaces   | <input type="checkbox"/> Body protection  |
| <input type="checkbox"/> Codes of Safe Operating/Work Practice | <input type="checkbox"/> Slip/trip/fall hazards   | <input type="checkbox"/> Hard hats         | <input type="checkbox"/> Foot protection  |
| <input type="checkbox"/> First aid treatment                   | <input type="checkbox"/> Protective vehicles      | <input type="checkbox"/> Safety glasses    |   |

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**SAFETY MEETINGS**

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# CHAPTER 3

## SAFETY INSPECTIONS

### HOW TO CONDUCT AND DOCUMENT SAFETY INSPECTIONS

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3.04	TYPES OF SAFETY INSPECTIONS AND FREQUENCY
3.05	RESPONSIBILITY FOR INSPECTIONS AND CORRECTIONS
3.06	MONITORING INSPECTIONS AND CORRECTIVE ACTIONS
3.07	STATE LAW PROHIBITS REPRISAL
3.08	INSPECTIONS GUIDELINES AND CHECKLIST

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**SAFETY INSPECTIONS**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 3

## SAFETY INSPECTIONS

### HOW TO CONDUCT AND DOCUMENT SAFETY INSPECTIONS

#### 3.00 INTRODUCTION

Safety inspections are required at all Caltrans owned, rented, or leased facilities, which includes office buildings, maintenance, surveys, or construction field offices, laboratory or repair shop. It also includes the grounds, parking lots, and perimeter fence areas adjacent to Caltrans facilities.

Conducting safety inspections is a mandatory requirement of the Department's Injury and Illness Prevention Program and Cal-OSHA regulations.

#### 3.01 PURPOSE

This chapter provides an easy-to-follow process for conducting and documenting safety inspections to identify and reduce safety and health hazards that may contribute to occupational injury or illness.

#### 3.02 BACKGROUND

Conducting safety inspections is based on Section 3203 of the General Industry Safety Orders (GISO) which requires:

“ . . . a system for identifying and evaluating workplace hazards, including scheduled periodic inspections to identify unsafe conditions and unsafe work practices.”

At Caltrans, the “. . . system for identifying and evaluating workplace hazards, including scheduled periodic inspections . . . ,” is expected to be accomplished by supervisors through regularly scheduled safety inspections.

#### 3.03 POLICY STATEMENT

Supervisors shall schedule, conduct, and document safety inspections in all work areas under their jurisdiction to identify and reduce physical and/or environmental hazards that may contribute to injuries or illnesses.

---

### 3.04 TYPES OF SAFETY INSPECTIONS AND FREQUENCY

Safety inspections are classified as: **Informal, Formal, and Special.**

First-line supervisors shall retain copies of all documentation covering safety inspections at their worksite for one (1) year.

#### **Informal Inspections**

Informal inspections are conducted by supervisors with participation by employees.

Informal inspection are conducted routinely in all work areas to identify and reduce physical and/or environmental hazards that may contribute to injuries or illnesses.

This means that in the course of normal daily activities supervisors and employees shall visually inspect the work area to identify unsafe conditions or unsafe acts and initiate corrective action as may be deemed necessary or appropriate.

This requires that each employee be alert to conditions that may contribute to causing an accident or illness and take the necessary corrective action.

Informal inspections can be conducted with minimum documentation, but any and all deficiencies no matter how minor must be documented along with the steps taken to correct the situation. Supervisors shall write down the specific findings and corrective actions including dates when corrections were made and/or scheduled.

- **Frequency of Informal Inspections**

Informal inspections shall be performed on a continuous basis by all supervisors whenever they are in the workplace. Supervisors should discuss the inspection process at the time they have their regularly scheduled safety meetings.



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## **Formal Inspections**

Formal inspections are conducted by building managers/facility personnel with cooperation by the local supervisor and employees.

Supervisors and employees are expected to cooperate with the building manager or facility personnel during a safety inspection.

The District or Headquarters Safety and Health Officer or staff are available to assist and/or participate in conducting safety inspections.

Before an inspection begins, the building manager should discuss the inspection schedule with the local supervisors to have agreement and to ensure that the inspection schedule will not disrupt the work. If it is found that the inspection schedule is untimely, the building manager and the supervisor shall discuss and agree to a time period that will be acceptable to both.

Formal inspections mean a walk-through inspection of a facility, or an operation for the distinct purpose of identifying unsafe conditions and unsafe acts and performing corrective action through a written report.

Formal inspections must be documented. The documentation must include specific identification of an observed hazard and dates by which the hazard will be corrected.

The following features should be investigated and checked:

parking lots, loading docks, driveways, exits and other wall openings, windows, floors, walkways, stairs, ramps, platforms, electrical panels and wiring, illumination, ventilation, heating and cooling, fire prevention equipment, water fountains, first aid kits, food service areas, rest rooms, training rooms, etc.

Formal inspections must have a follow-up procedure to assure that the identified hazards, unsafe conditions, or unsafe acts are corrected in compliance with applicable safety and health laws, rules, or policies in a timely manner.

Building managers or individuals responsible for the operation of a Caltrans facility shall establish an inspection schedule for each facility under their jurisdiction.

### **• Frequency of Formal Inspection**

Formal inspections shall be conducted at all fixed worksites, whenever conditions warrant, but not less than once a year. Fixed worksites include all Caltrans owned, rented, and/or leased facilities.

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## **Special Inspections**

Special inspections are conducted by building managers/facility personnel, or by members of the District or Headquarters Safety and Health Office, upon request and with cooperation by the local supervisor and employees.

Special inspections are performed in response to reports of alleged unsafe acts or unsafe conditions or to evaluate the hazards or health risks that may be associated with existing and/or new substances, processes, procedures, or equipment. A special inspection may also be conducted in conjunction with an accident investigation.

Special inspections must be documented. The documentation must include specific identification of observed hazards and dates by which the hazards will be corrected.

Special inspections must have a follow-up procedure to assure that the identified hazards, unsafe conditions, or unsafe acts are corrected in compliance with applicable safety and health laws, rules, or policies in a timely manner.

- **Frequency of Special Inspections**

By definition, special inspections are usually conducted upon request or whenever an unusual event occurs or is reported.

A special inspection shall be conducted whenever an unsafe condition, unsafe act, or hazard is identified or reported that may contribute to injury or illness in the workplace.

Inspection response time to these special circumstances shall be based upon the severity of the identified hazard.

Serious and/or life threatening hazards shall be acted upon immediately by the supervisor or other person(s). Specific action may include stopping a work activity or taking any other measures necessary to protect employees, the facility, and/or equipment. The hazard must be corrected or the situation or unsafe condition must be neutralized.

For non-serious situations, a safety inspection may be conducted as soon as possible after the initial reporting, identification, or recognition of a hazard.

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### **3.05 RESPONSIBILITY FOR INSPECTIONS AND CORRECTIONS**

Before starting work, every supervisor and/or employee should visually inspect his or her work area, motor vehicle, and equipment for unsafe conditions.

Any alleged unsafe condition, or unsafe act that is observed, should be reported to the supervisor immediately. Supervisors shall initiate appropriate corrective action.

The supervisor should determine if the alleged unsafe condition can be handled routinely, or if the alleged unsafe condition is acute and requires immediate action. If the recommended corrective action is beyond the ability of the first-line supervisor, the second-line supervisors shall be consulted and an appropriate action plan shall be jointly developed to ensure that alleged or actual unsafe condition(s) are corrected in a timely manner.

If the supervisor believes that his/her employees are being required to work where a clear and present danger may exist, he/she shall immediately investigate the situation and either direct the employee to temporarily perform some other task, or proclaim the situation safe and direct the employee to proceed with his/her assigned duties.

If the supervisor is not available, employees shall contact another supervisor or the District or Headquarters Safety and Health Office for assistance.

### **3.06 MONITORING INSPECTIONS AND CORRECTIVE ACTIONS**

Second-line supervisors are responsible to monitor their subordinate supervisors to ensure that informal and formal inspections are conducted at each worksite on a regular basis. They are also responsible to ensure that special inspections are conducted as requested or required.

The second-line supervisor shall periodically review the inspection documentation to ensure all recommended corrective actions are appropriate and corrected in a timely manner.

Second-line supervisors shall assist in developing and/or arranging for budgeting if a recommendation for corrective action is beyond the ability of the first-line supervisor to arrange for or accomplish.

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**3.07 STATE LAW PROHIBITS REPRISAL**

State law prohibits reprisal against, or taking corrective action against, any employee as a result of identifying and/or reporting an unsafe condition, unsafe act, or practice found in connection with any work activity.

Employees should be informed of any action or actions taken to correct an alleged unsafe condition, unsafe act, or practice that has been reported.

\* \* \* \* \*

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### 3.08 INSPECTION GUIDELINES

The following are general guidelines for conducting safety inspections. These guidelines focus on formal inspections, but some elements of the process are applicable to all inspections.

When conducting a safety inspection:

1. Use a checklist. Review the checklist before the inspection begins.
2. Inspect the entire work area or facility.
3. Prepare an inspection sequence - inspect in one area at a time.  
(Focus on one room at a time, one floor at a time.)
4. Have the supervisor or someone familiar with the facility and operation accompany the inspector to answer questions that may arise during the inspection.
5. Ask affected employees who work in the area for input during the inspection. Try to resolve questions during the inspection, rather than going back to inspect a second time.
6. Focus the inspection on unsafe acts and unsafe conditions.
7. Document the hazard(s) observed clearly and accurately.
8. Document the participants in the inspection.
9. Following the inspection, have agreement to;
  - a. set reasonable dates for correction (based upon the hazard);
  - b. set priority for correcting the hazards;
  - c. correct serious hazards immediately; and
  - d. agree if correction cannot be handled in a timely manner, take other measures to protect employees:
    - 1) change the work procedure,
    - 2) take the machine out of service,
    - 3) stop the operation, and,
    - 4) take any action as may be necessary to protect employees; and
  - e. non-serious hazards must be corrected as soon as possible after they have been identified.
10. Prepare a written report.
11. A copy of the written report shall be sent to first-line and second-line supervisor, District/Headquarters Employee Safety and Health Officers and/or, other appropriate management personnel for review.

NOTE: Safety inspection and/or operational review checklists are available from the District or Headquarters Office of Safety and Health.

A sample of an office check list is shown on the next two (2) pages. This checklist can be removed from the manual, copied, and replaced.

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**SAFETY INSPECTIONS**

**THIS SPACE AVAILABLE FOR NOTES:**

A CHECKLIST FOR OFFICE LOCATIONSPage 1 of 2

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

**SAFETY INSPECTIONS SAMPLE CHECKLIST**

PM-S-011 (NEW 11/98)

Page 1 of 2

A CHECKLIST FOR OFFICE LOCATIONS

LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

CONDUCTED BY: \_\_\_\_\_

<u>Yes</u>	<u>No</u>	<u>Item</u>	<u>Yes</u>	<u>NO</u>	<u>Item</u>
<input type="checkbox"/>	<input type="checkbox"/>	Name of responsible person for work place identified.	<input type="checkbox"/>	<input type="checkbox"/>	Knowledge of Injury and Illness Prevention Program.
<input type="checkbox"/>	<input type="checkbox"/>	Safety Manual available.	<input type="checkbox"/>	<input type="checkbox"/>	Safety meetings scheduled and conducted.
<input type="checkbox"/>	<input type="checkbox"/>	Safety inspections scheduled and conducted.	<input type="checkbox"/>	<input type="checkbox"/>	Safety training scheduled and conducted.
<input type="checkbox"/>	<input type="checkbox"/>	Accidents reported, investigated, and documented.	<input type="checkbox"/>	<input type="checkbox"/>	All applicable records maintained.
<input type="checkbox"/>	<input type="checkbox"/>	Bulletin boards with Cal-OSHA and other notices visible.	<input type="checkbox"/>	<input type="checkbox"/>	Emergency phone numbers available.
<input type="checkbox"/>	<input type="checkbox"/>	First aid kit / supplies available / replenished.	<input type="checkbox"/>	<input type="checkbox"/>	Emergency lighting available.
<input type="checkbox"/>	<input type="checkbox"/>	Person trained in first aid / CPR available.	<input type="checkbox"/>	<input type="checkbox"/>	Exits routes clearly marked.
<input type="checkbox"/>	<input type="checkbox"/>	Emergency action plan available.	<input type="checkbox"/>	<input type="checkbox"/>	Panic hardware on exit doors.
<input type="checkbox"/>	<input type="checkbox"/>	Fire doors kept closed / open as required.	<input type="checkbox"/>	<input type="checkbox"/>	Fire extinguishers easily located.

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**SAFETY INSPECTIONS**

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STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

**SAFETY INSPECTIONS SAMPLE CHECKLIST**

PM-S-011 (NEW 11/98)

Page 2 of 2

<u>Yes</u>	<u>No</u>	<u>Item</u>	<u>Yes</u>	<u>No</u>	<u>Item</u>
<input type="checkbox"/>	<input type="checkbox"/>	Fire extinguisher maintained and dated.	<input type="checkbox"/>	<input type="checkbox"/>	Stairways with slip-resistant treads.
<input type="checkbox"/>	<input type="checkbox"/>	Aisles, stairs, floors clean and clear of obstructions.	<input type="checkbox"/>	<input type="checkbox"/>	Cabinets secured to walls to avoid tipping over.
<input type="checkbox"/>	<input type="checkbox"/>	No heavy objects on cabinets / windows sills.	<input type="checkbox"/>	<input type="checkbox"/>	Glass doors / partitions impact resistant.
<input type="checkbox"/>	<input type="checkbox"/>	Minimum of 24 inches for walking around office furniture.	<input type="checkbox"/>	<input type="checkbox"/>	Work surfaces clean and orderly.
<input type="checkbox"/>	<input type="checkbox"/>	Minimum of 44 inches for walking in hallways.	<input type="checkbox"/>	<input type="checkbox"/>	Electrical cords not a tripping hazard.
<input type="checkbox"/>	<input type="checkbox"/>	Electrical cords in good repair and properly grounded.	<input type="checkbox"/>	<input type="checkbox"/>	Electrical panels not blocked.
<input type="checkbox"/>	<input type="checkbox"/>	Electrical extension cords not used.	<input type="checkbox"/>	<input type="checkbox"/>	MSDS sheets available, if applicable.
<input type="checkbox"/>	<input type="checkbox"/>	Spilled materials or liquids cleaned up immediately.	<input type="checkbox"/>	<input type="checkbox"/>	Toilets and wash facilities clean and sanitary.
<input type="checkbox"/>	<input type="checkbox"/>	Work areas adequately illuminated.	<input type="checkbox"/>	<input type="checkbox"/>	Materials piled, stacked, do not create hazard.

COMMENTS:

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CORRECTION MADE:

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This checklist is not a substitute for, or legal interpretation of Cal-OSHA standards. It is meant to be a guide to evaluate and correct potential unsafe conditions in the workplace.

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**SAFETY INSPECTIONS**

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# CHAPTER 4

## ACCIDENT INVESTIGATION AND ANALYSIS

### HOW TO INVESTIGATE, ANALYZE, AND DOCUMENT ACCIDENTS

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4.05	FACT FINDING
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**ACCIDENT INVESTIGATION AND ANALYSIS**

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# CHAPTER 4

## ACCIDENT INVESTIGATION AND ANALYSIS

### HOW TO INVESTIGATE, ANALYZE, AND DOCUMENT ACCIDENTS

#### 4.00 INTRODUCTION

This chapter deals with promoting and maintaining an interest in accident investigation and analysis. Its primary focus is to provide an understanding of investigative techniques that will make an investigation and analysis easier to conduct. The techniques discussed in this chapter can be used to investigate accidents associated with any work activity.

Investigating and documenting occupational injuries and illnesses is a mandatory requirement of the Department's Injury and Illness Prevention Program and Cal/OSHA regulations.

#### 4.01 PURPOSE

The purpose of this chapter is to provide basic information about accident investigation techniques and procedures. Management encourages accident prevention through aggressive investigation and analysis as a defense against hazards in the workplace.

An accident is broadly defined as an undesired event that results in physical harm to a person or damage to property and/or the interruption of a process. It also includes events that result in a non-injury, a near hit, an occupational illness, or exposure to hazardous substances.

#### 4.02 POLICY STATEMENT

Supervisors shall investigate, analyze, and document every vehicle accident, occupational injury and/or illness in a timely manner to identify contributing factors that will prevent further occurrences.

### **4.03 WHO SHOULD CONDUCT ACCIDENT INVESTIGATIONS?**

- **THE FIRST-LINE SUPERVISOR**

Since investigating and documenting occupational injuries and illnesses is a mandatory requirement of the Department's safety program and Cal/OSHA regulations, the first-line supervisor is responsible to conduct an investigation. The first-line supervisor is generally on the scene and probably knows more about the accident and accident scene than anyone else.

- **THE SECOND-LINE SUPERVISOR**

A representative of management should review the findings of the first-line supervisor. The management review also ensures that first-line supervisors are conducting accident investigations.

- **THE SAFETY SPECIALIST**

A representative of the District or Headquarters Office of Safety and Health is available to advise and/or assist in the investigative effort. The safety staff have specialized training and experience that enables them to search for all the facts, apparent and hidden. Safety Specialists are impartial and their primary interest is to gather information that can be used to prevent a similar accident. The Safety Specialist can also help identify violations of policy, law, and assist in suggestion of corrective measures.

### **4.04 ANALYZING THE ACCIDENT SCENE**

An investigation should be made as soon after the accident as possible. Any delay may result in evidence being destroyed or removed.

A documented review of the accident scene will produce information that can help:

- identify and locate the materials, machines, and tools involved in the accident.
- reveal deficiencies in operating processes and procedures.
- disclose unsafe work practices caused by a lack of training.

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#### **4.05 FACT FINDING**

The purpose of an accident investigation is to find facts not fault. The facts will then serve as a guide to the conditions that caused the accident. The facts should identify the "why" or root cause of the accident as well as the "who, what, when, and where."

The goal of fact finding is to have the investigator expand their thinking and not focus solely on the type of accident or the injury. A broader view of the facts surrounding the accident will help point to contributing factors that lead to the root cause. This expanded view will also help the investigator identify a variety of preventive measures used to correct the situation or condition.

The following information lists a variety of subject areas that should be included in an accident investigation. The investigator must be creative and inquisitive. Review the following items:

- **WORK CHARACTERISTICS -**  
What is the type of work activity and the size of the operation?  
How many employees are involved? Too many, too few?
- **ENVIRONMENT -**  
Was the weather a contributing factor: clear, rain, snow?
- **TIME FACTORS -**  
The time of day, and how it relates to the shift, whether first hour or last: swing shift, straight eight, or rotating. The phase of the employees work: performing work, rest period, lunch period, overtime, entering or leaving the work site, building, or office.
- **EMPLOYEE CHARACTERISTICS -**  
What is the victim's work experience?  
How often is the work activity repeated? How often has the employee engaged in such work? How much training and when was the last training?
- **A NARRATIVE DESCRIPTION -**  
Explain what the person was doing. What objects were involved? Which actions and movements led to the accident?

- 
- **EQUIPMENT CHARACTERISTICS -**  
Describe the type, brand, model, size, and any distinguishing features, its condition, and the specific part of the equipment involved. Include the identification number, and any known modifications that may have been made to the equipment.
  - **CHARACTERISTICS OF THE TASK -**  
The general task being performed (repairing a wing plow) and the specific activity (using a power impact wrench). The posture and location of employee (squatting under the rear of the truck). Working alone or with others.
  - **PREVENTIVE MEASURES -**  
What personal protective equipment was being worn? What kind of training did the employee have for the task he or she was performing? Did standards for the procedure exist? Were they written? Were they followed? Where was the supervisor at the time of the accident?
  - **ACCIDENT SEVERITY-**  
The nature of the injury or injuries and parts of the body affected.

After reviewing these statements, the final analysis should suggest specific corrective action or actions that will prevent recurrences of the sequence of events that led to the accident.



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#### **4.06 CATEGORIES FOR CORRECTIVE ACTION**

The investigator must first form a basic understanding of the events that took place. Then at each step of the sequence of events he/she should see if a change in one of those areas would have prevented the sequence from continuing.

The following list of categories should be evaluated for practicality, cost, feasibility, reliability, acceptance, and other factors deemed important before deciding which to implement. The selection process should not stop with only a favorite idea or favorite action; each action chosen for consideration and implementation should be well thought out. Things to look at are:

##### **A. MACHINES**

1. Hazardous conditions, construction, or design.
2. Equipment, tools, and objects.

##### **B. PHYSICAL WORK ENVIRONMENT**

1. Location of equipment, tools, and objects in the workplace.
2. Location of employees in the work space.

##### **C. EMPLOYEES**

1. Action, task, or activity.
2. Work procedures.
3. Personal protective equipment.

##### **D. MANAGEMENT**

1. Supervision.
2. Program evaluation.
3. Training.

#### **4.07 APPLYING THE ANALYSIS**

An analysis will always reveal information which can be used effectively in reducing accidents. Merely obtaining the information will not prevent recurrence of the accident. The conditions which contribute to the accident must be corrected.

It must be stressed that these guidelines do not provide a ready answer to accident prevention, but rather a guide to aid in accident investigations, analysis, and corrective action. Corrective action must focus on such things as eliminating unsafe conditions and correcting unsafe acts. See definitions on next page.

#### UNSAFE CONDITION:

An unsafe condition is a mechanical and/or physical hazard that is recognized, but not corrected and/or ignored, or an unrecognized mechanical and/or physical hazard.

#### UNSAFE ACT:

An unsafe act is when an employee(s) deviates from a written and/or verbal instruction, policy, procedure, work practice.

### **4.08 HUMAN FACTORS AND THE ACCIDENT ANALYSIS**

The following human factors are considered the most frequent cause of accidents:

- |                             |                                |                   |
|-----------------------------|--------------------------------|-------------------|
| •Physical inability         | •Overconfidence                | •Absentmindedness |
| •Boredom                    | •Disregard of danger           | •Undue haste      |
| •Distraction                | •Anger                         | •Indifference     |
| •Impatience                 | •Horseplay                     | •Fatigue          |
| •Resentment<br>of authority | •Inattention<br>to instruction | •Stress           |

The following paragraph illustrates some of the contributing human factors listed above:

A worker who lacks skill at a job of loading heavy parts may become fatigued from his/her clumsy efforts to do what a more skilled worker would do easily. This same unskilled worker would fall behind and then try to hurry to catch up. Encountering a minor difficulty, the same employee may lose patience and throw his/her weight needlessly into the task which could result in a fall or other injury. It is easy to see that one cause of the unsafe act was anger or impatience. Other causes were undue haste, fatigue, and a lack of skill. However, the root cause was lack of proper training.

---

#### **4.09 PREPARING THE INVESTIGATIVE REPORT**

Accurate records of accidents or near-misses are essential to an efficient and successful accident investigation and analysis program. Well-documented accident investigations will contain information that can be used to transform haphazard, costly, and ineffective work into a planned safety program. The investigation should point to the cause. It should indicate such things as:

1. At what point did the system break down?
2. Were rules and regulations violated?
3. Did poor layout of the job, process, or operation contribute to the accident?
4. What human or environmental factors contributed to the accident?

The investigation should be handled by the supervisor and reviewed by others as may be deemed appropriate. The investigator should know the nature of the work, how it should be done, and under which conditions it was done. The investigator's questions and attitude should demonstrate that the purpose is to gather the facts. The investigator should not be interested in fault or trying to fix blame.

Start with reviewing and assessing the accident scene. Reconstruct the events that led up to the accident.

If necessary, consider taking pictures, measure, and draw a diagram. List all the machines, equipment, and materials that were being used. Get a list of witnesses. Where were they and what did they see or hear? Interview the employee directly involved. If the injury is minor, proceed; if seriously injured, postpone until medical needs are taken care of.

Consider a re-enactment of the events that led to the accident. Try a walk-through and a talk-through re-enactment.

NEVER ASK AN EMPLOYEE(S) TO REPEAT A JOB WHERE AN OBVIOUS VIOLATION OF DIRECTIVES OR AN UNSAFE WORK PRACTICE IS EVIDENT.

The re-enactment will help explain the relationship between the work crew or person, the machine, and the environment.

**4.10 COMPLETING THE "ACCIDENT INVESTIGATION FORM"**

This chapter provides two (2) accident investigative forms. The first form is a short-version, 2-page document. The second form is six (6) pages and provides for more in-depth analysis.

When filling out either form, remember the information must be reliable, accurate, and in sufficient detail to make an informed decision. The sample investigative forms shown at the end of the chapter provide space to answer each question or statement that may relate to an accident.

The form(s) may be removed from the manual for easy reproduction.

Do not forget to replace the original back in the manual.

The completed investigative form should be routed to the individuals or positions suggested on the form. Also send the District/Headquarters Office of Safety and Health a copy of all accident investigations.

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## ACCIDENT INVESTIGATION REPORT

Date of Accident: \_\_\_\_\_ Time of Day: \_\_\_\_\_ am \_\_\_\_\_ pm

Name of Injured Employee: \_\_\_\_\_

Name of Supervisor/Investigator: \_\_\_\_\_

What was the apparent nature of the employee's injuries?

---



---

DESCRIPTION OF ACCIDENT: What was the employee doing?

---



---



---

LOCATION: Where Did the Accident Happen?

---



---

WITNESSES: List the names of other employees who may be witnesses:

_____	_____
_____	_____
_____	_____

UNSAFE CONDITIONS: What was unsafe about the operation, the equipment, tools, or the location?  
Why did the unsafe condition exist?

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# ACCIDENT INVESTIGATIONS

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UNSAFE ACTS: What was done or not done, did anyone do or fail to do that led to the accident?

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---

RECOMMENDATIONS: What action has/should be taken to prevent a similar accident?

1. 

---

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2. 

---

---
3. 

---

---

REMARKS OR COMMENTS:

---

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PREPARED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

COPY SENT TO:

District/Headquarters Safety Office

DATE: \_\_\_\_\_

\_\_\_\_\_

DATE: \_\_\_\_\_

---

**4.11 AN ALTERNATE ACCIDENT INVESTIGATION REPORT****"REPORT OF AN OCCUPATIONAL INJURY OR ILLNESS"**

The following section describes the alternate accident investigative report. Individual investigators may select either form for their investigative efforts.

**INVESTIGATIVE FACTORS:**

Because of the infinite number of situations and contributing factors, it is impossible to list all the questions that may apply to a specific accident or event. The following list of items are generally applicable, and should be considered in addition to the statements shown on the accident investigation form.

- What were others doing at the time of the accident?
- Was the person following clearly defined procedures?
- Was the process or task new to the group?
- Did the person/crew receive hazard recognition training?
- Was the person doing authorized work?
- Was the person qualified to do the work?
- Was the correct equipment being used?
- Where was the supervisor?
- Was some type of corrective action suggested in the past, but not taken?

When other questions come to mind, they should be recorded and answered. Summarize the information and record all the facts on the accident report.

**REVIEWS AND APPROVALS:**

The following is a suggested list of individuals who should be considered for the review and approval process:

1. The Supervisor
2. The Branch Chief, Region Manager, Area Superintendent
3. The Safety Coordinator (Functional area)
4. The District Employee Safety and Health Officer
5. The Headquarters Employee Safety and Health Officer
6. Other: \_\_\_\_\_

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**ACCIDENT INVESTIGATION AND ANALYSIS**

**THIS SPACE AVAILABLE FOR NOTES:**



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REPORT OF AN OCCUPATIONAL INJURY OR ILLNESS

Date of Accident or Event: \_\_\_\_\_

Date of Investigation: \_\_\_\_\_

Identification Number: \_\_\_\_\_

Location: \_\_\_\_\_

Type of Work Activity: \_\_\_\_\_

Name of Supervisor: \_\_\_\_\_

\*\*\*\*\*

ACCIDENT CATEGORY:    ☐    INJURY    ☐    NON-INJURY    ☐    NEAR-MISS    ☐    ILLNESS  
                                  ☐    EXPOSURE TO HAZARDOUS SUBSTANCE    ☐    PROPERTY DAMAGE    ☐    OTHER

Name of employee injured, ill or exposed: \_\_\_\_\_

Classification: \_\_\_\_\_

EMPLOYEE WORK EXPERIENCE:

☐    Full-Time    ☐    Part-Time    ☐    Seasonal    ☐    Other: \_\_\_\_\_

How long in current assignment? \_\_\_\_\_

How long with Department? \_\_\_\_\_

WHAT IS THE APPARENT NATURE OF THE EMPLOYEE'S INJURY/ILLNESS?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**THE ACCIDENT SCENE:** Describe the accident scene. Where did the accident happen ? (Example: in room 222, on Highway 20, at PM 7.35, near the Thomas C. Hague Commemorative Bridge, the #2 toll booth at the Bay Bridge)

**THE ACCIDENT OR EVENT:** Describe what happened. (Example: the maintenance worker removed the cap from the gasoline tank. The gas spilled onto the ground causing the worker to slip and fall. The worker twisted his ankle and broke his arm when he fell.)

**IDENTIFY WHAT WAS BEING USED:** What objects/tools/substances were involved? (Example: The ladder was not supported. The table saw was in the "on" position. Possible lack of oxygen in the confined space. Soap and water. Cleaning solvent not ventilated.)

**DESCRIBE THE WORK ENVIRONMENT?**  
(Weather/temperature/light/noise/machinery/aisles/features existed at the time of the accident)

**WHAT VEHICLE/EQUIPMENT WAS BEING USED?**  
(Type/brand name/size/features/condition/how old/parts involved. Include C- No. and Item -No. )

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WHAT WAS THE SPECIFIC TASK/WORK ACTIVITY?

(Repairing computer/repairing a wing plow/walking up the stairs/flagging traffic/sitting at drafting table/walking on airport runway)

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OTHER SPECIFIC ACTIVITY: (posture, movement/shoveling snow/using power impact wrench/squatting under conveyor belt/pushing mail cart/lifting copy machine cover)

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THE WORK CREW: (how many in work crew? working alone or with others?)

---

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TIME FACTORS AND THE TIME OF DAY: HOW IT RELATES TO THE SHIFT: (first half of shift/overtime/rotating/straight eight/rest period/lunch break/entering the work area/leaving the work area)

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PROTECTIVE EQUIPMENT/PREVENTIVE MEASURES: (personal protective equipment being used; hard hat, glasses, gloves, clothing/did apparel affect the accident?, were all safety guards in place?)

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WORK/SAFETY STANDARDS: (Did standards exists for the job? Were they written/verbal/ followed/understood? Was a Code of Safe Operating Procedures discussed?)

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SCHEDULING OF WORK: (Did the work/task have to be scheduled at the time of the accident? Could the work/task have been scheduled at a different time or date?)

---

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SUPERVISION: (What was the nature of supervision? Supervisor present/not present: leadworker present/not present)

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TRAINING/INSTRUCTION: (Had employee been specifically trained in the activity?)

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OTHER COMMENTS: (Summary) Continued on next page.

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OTHER COMMENTS: (continued)

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INVESTIGATED BY: \_\_\_\_\_ Date: \_\_\_\_\_

REVIEWED BY: \_\_\_\_\_ Date: \_\_\_\_\_

## RECOMMENDATIONS:

The following corrective actions are recommended:

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

## RECOMMENDATIONS APPROVED:

By: \_\_\_\_\_ Date: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_

COPY SENT TO: \_\_\_\_\_ Date: \_\_\_\_\_

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**ACCIDENT INVESTIGATION REPORT:**

**USE THIS SPACE FOR NOTES, SKETCHES, OR DRAWINGS.**

ADDITIONAL SHEETS ATTACHED: YES \_\_\_\_ NO \_\_\_\_

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# CHAPTER 5

## **OFFICE WORKER SAFETY**

### **SAFETY AND HEALTH FOR OFFICE WORKERS, AND THOSE WHO OCCASIONALLY TRAVEL**

#### **TABLE OF CONTENTS**

5.00	INTRODUCTION
5.01	PURPOSE
5.02	POLICY STATEMENT
5.03	BACKGROUND
5.04	WHO IS RESPONSIBLE FOR SAFETY AND HEALTH
	A. The supervisor's role
	B. The employee's role

#### **PART 1. SAFETY AND HEALTH FOR OFFICE WORKERS**

#### **OFFICE SAFETY AND GOOD HOUSEKEEPING**

5.10	Worksite safety inspections
5.11	Good housekeeping guidelines
5.12	Aisle and hallway widths
5.13	Electrical safety
5.14	Securing furniture and equipment
5.15	Material/office supply storage
5.16	Stairways
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**PART 2. SAFETY AND HEALTH FOR OFFICE WORKERS WHO  
OCCASIONALLY TRAVEL****PREPARING FOR FIELD TRIPS**

- 5.20 Trip planning
- 5.21 Motel, hotel, dining out, and sightseeing safety
- 5.22 Personal clothing
- 5.23 Use of seat belts and shoulder harnesses
- 5.24 Visiting a construction or maintenance project

**USING PERSONAL PROTECTIVE EQUIPMENT (PPE)**

- 5.25 Head protection
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**SPECIAL WORK ACTIVITIES**

- 5.29 Parking and/or stopping along highways
- 5.30 Using physical barriers
- 5.31 Using a lookout
- 5.32 Working in median areas
- 5.33 Amber warning lights
- 5.34 Night work
- 5.35 Hazardous spills



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# CHAPTER 5

## **OFFICE WORKER SAFETY**

### **SAFETY AND HEALTH FOR OFFICE WORKERS, AND THOSE WHO OCCASIONALLY TRAVEL**

#### **5.00 INTRODUCTION**

Office workers can be divided into: employees who work in an office setting and do not travel, and employees who work in an office setting, and because of the nature of their work assignment, occasionally or routinely travel to other locations.

#### **5.01 PURPOSE**

The purpose of this chapter is to provide information about safety and health issues unique to office settings, and specific instructions for supervisors and employees who may occasionally or routinely leave their office and take field trips.

Because of the different working conditions between those who do not travel for or on their job and those who do, this chapter has been divided into two (2) parts as follows:

**PART 1.** SAFETY AND HEALTH FOR OFFICER WORKERS, covers office safety and good housekeeping.

**PART 2.** SAFETY AND HEALTH FOR OFFICE WORKERS WHO OCCASIONALLY TRAVEL, covers preparing for field trips, use of personal protective equipment (PPE), and special work activities.

#### **5.02 POLICY STATEMENT**

Managers, supervisors, and employees shall do everything reasonably possible to maintain a safe and healthy work environment in all places of employment.

#### **5.03 BACKGROUND**

The policies, practices, and standards described in this chapter are based on a variety of regulations, including Cal-OSHA, Uniform Building Code (UBC) standards, or other cited authorities. Some of the requirements are based on Departmental policies as contained in Director's Policy statements, Deputy Directives, Department of General Services Management Memos, and/or the State Administrative Manual (SAM).

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## **5.04 WHO IS RESPONSIBLE FOR SAFETY AND HEALTH**

### **A. The supervisor's role**

It is Caltrans policy that supervisors are responsible for the safety and health of their employees and for ensuring that the work environment does not contribute to injury or illness.

To fulfill these responsibilities, supervisors are required to routinely conduct safety inspections and have regularly scheduled safety meetings with their employees to discuss safety and health issues.

Supervisors are responsible to enforce all safety and health policies, procedures and work practices. Whenever an employee violates a safety and health policy, law, regulation or rule, supervisors shall consider appropriate disciplinary action.

Supervisors will also discuss medical or other emergency situations and emergency procedures contained in their local Emergency Action Plan with their employees.

#### **NOTE:**

Supervisors are responsible to maintain a copy of the "Emergency Notification Information" form in their files for emergency information purposes.

The form provides space for the name of a family member or designated person to contact following an emergency, name of predesignated personal physician, and provides space to indicate (yes or no) that they may need special assistance during an emergency evacuation.

See Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT, Section 9.06 WHOM TO NOTIFY IN CASE OF AN EMERGENCY for details.

The supervisor's safety and health responsibility applies to the office work setting, and if an employee is directed to leave his/her office, walk to another near-by office, or drive a motor vehicle to another city.

When the employee leaves his/her office and takes a field trip, the supervisor must discuss potential hazards before the trip begins. The use of personal protective equipment, including hard hats, safety glasses, warning garments, and foot protection, must also be explained.

**B. The employee's role**

All employees are expected to report to work mentally and physically capable of performing all of their assigned duties without jeopardizing the safety and health of themselves, other employees, or the public.

Employees shall be free from the effects of medication, controlled substances, alcohol, or the complications arising from illness or injury which might impair their judgement and/or ability to perform their work. Employees shall be able to perform his/her assigned duties in a safe manner.

Employees are responsible to do everything reasonably necessary to protect their own safety and health and that of others by complying with all occupational safety and health policies, procedures, laws, rules or regulations.

Employees shall promptly report all injuries, illnesses, or unsafe conditions to their supervisor immediately, or at least before the end of the work shift.

Employees are responsible to inform their supervisor of any changes in home address, medical condition, name of a family member or designated person to contact following an emergency, choice of predesignated personal physician, and should advise their supervisor that they may need assistance during an emergency evacuation.

**NOTE:**

Employees are responsible to update the information on their Emergency Notification Information form for emergency information purposes. They should also inform their supervisor if their physical or medical condition changes that would require them to need special assistance during an emergency evacuation.

---

## **PART 1. SAFETY AND HEALTH FOR OFFICE WORKERS**

### **OFFICE SAFETY AND GOOD HOUSEKEEPING**

The information in this section applies to all employees, but its primary focus is for supervisors and employees who work in an office setting and do not travel.

Office work areas are subject to several safety and health regulations contained in the General Industry Safety Orders (GISO), and the Electrical Safety Orders (ESO) of the Cal-OSHA regulations. Additionally, state offices are also subject to the requirements of the Uniform Building Code (UBC).

The information in PART 1. of this chapter represents some of the most frequently followed safety and health regulations applicable to office safety. Some of the information contained in this chapter has been condensed from other chapters of the manual. Where applicable, a cross reference has been noted.

#### **5.10 Worksite safety inspections**

Supervisors are responsible to identify, reduce and/or eliminate physical or environmental hazards that may contribute to injuries or illnesses. They should also routinely review and study their operating methods, practices, and procedures to reduce the potential for injury or illness.

Worksite inspections should be conducted as follows:

- **Informal inspections** - in the course of daily work to observe and correct immediately any unsafe condition or unsafe act. Written reports are not usually required.
- **Formal inspections** - walk-through inspections for the distinct purpose of identifying unsafe conditions or unsafe acts, and/or physical or environmental hazards, writing reports and scheduling dates for correction. Conducted at least annually at all fixed worksites.
- **Special inspections** - performed in response to reports of unsafe conditions or actions and to evaluate hazards or health risks that may be associated with new products, processes, or equipment with written report and dates for correction. These inspections usually take place when a supervisor asks for assistance in handling new activities or products, and/or whenever unsafe conditions or actions are reported.

See Chapter 3 - SAFETY INSPECTIONS for more detailed information and a sample office work area inspection checklist.

---

### **5.11 Good housekeeping guidelines**

Offices, store-rooms, personal service rooms, hallways and passageways shall be kept clean, orderly and in a sanitary condition to the extent that the nature of the work allows. Office furniture and equipment should be laid out for efficiency, convenience, and safety.

All floors shall be free of dangerous projections or obstructions, maintained in good repair, dry or slip-resistant, and have no tripping hazards. Defective tiles or carpet are to be reported to the building maintenance staff and repaired.

- **Ergonomic standard**

Employees shall be provided with furniture and equipment that meets state standards. See Chapter 7 - ERGONOMICS for more details.

- **Moving furniture, equipment, or storage boxes**

Office furniture and equipment should not be moved by employees. Supervisors should arrange for professional movers by contacting the Building Manager or Facility Operations office in your District or other Caltrans facility.

- **Lifting of equipment, supplies, and other items**

There are no written standards to control the amount of weight that a person can lift without causing injury. Whenever any object is to be lifted, some discretion or judgement must be used. Employees should never lift anything that may cause injury. Always ask for assistance.

Storage boxes, monthly supplies, or containers with unknown or heavy contents should not be lifted without first inspecting the contents and then use proper lifting techniques.

See Chapter 7 - ERGONOMICS for information regarding proper lifting techniques.

### 5.12 Aisle and hallway widths

The minimum space requirements for aisles and hallways are based on the Cal-OSHA, General Industry Safety Orders (GISO) and the construction standards contained in the Uniform Building Code (UBC).

The minimum requirements for office areas are:

- **Within an office or work station, use: The 24" standard**

This standard requires unobstructed walking space between and around desks, chairs, book cases, file cabinets, credenzas, and other general office furniture or equipment, and/or walls partitions. The wall partitions may be portable or permanent.

- **In a hallway or walkway, use: The 44" standard**

The UBC has established a 44 inch minimum width for routes of travel by persons with disabilities.

The 44 inch standard applies to all types of hallways and walkways, e.g., used as egress and ingress to work areas or offices. These walkways may be main hallways of a building or they may be lateral hallways connecting work areas and/or offices. They may be between or adjacent to permanent or moveable wall partitions.

Designated hallways and walkways may be wider than 44 inches, but must have at least 44 inches of unobstructed walking space.

- **In common work areas, use The 44" standard**

The 44 inch standard is also required in the walking or standing space found in common work areas, such as in front of storage areas or equipment or copier machines, drinking fountains, file cabinets, kitchen areas, work tables for common use, and generally any work area that is used by various employees during a work shift.

---

### 5.13 Electrical safety

Office work areas are subject to the Cal-OSHA Electrical Safety Orders (ESO). The following represents some of the pertinent electrical safety standards.

Electrical power cords for computers, printers, or other electrical devices shall not be placed on the floor unprotected or where they may create a tripping hazard.

Electrical extension cords are permitted, but shall not be used as a substitute for fixed wiring. New electrical outlets should be installed to eliminate the need to use extension cords where possible.

When a telephone or electrical box on the floor is exposed the box should be marked as a hazard until the hazard is removed.

### 5.14 Securing furniture and equipment

In order to be prepared for emergencies such as earthquakes, certain office furniture and equipment should be secured to walls or floors.

The following guidelines should be followed when securing office furniture and equipment:

- File cabinets/storage cabinets, five (5) feet or shorter need not be secured to walls or floors.
- File cabinets/storage cabinets between five (5) feet and six (6) feet should be placed against permanent walls and be secured to the wall.
- If wall space is not available, file/storage cabinets between five (5) feet and six (6) feet may be placed in open areas, placed back-to-back and secured to each other, or the floor.
- File cabinets/storage cabinets, (6) feet or taller, shall be placed against permanent walls and secured to the wall.
- If wall space is not available, file/storage cabinets six (6) feet or taller may be placed in open areas, provided they are placed back-to-back and secured to each other and the floor.

**5.15 Material/office supply storage**

Office supplies should be stored in appropriate areas set aside for that purpose, and not where they will contribute to injury.

**Do not:**

1. Store materials on top of modular furniture overheads or cabinets.
2. Store materials above the level of your shoulders.
3. Place objects such as flower pots and vases on windowsills or ledges.
4. Place card index files, dictionaries, or other heavy objects on top of file cabinets greater than 5' tall..
5. Use storage boxes (cardboard boxes) as room dividers.
6. Use walkways, hallways, stairwells, and landings for storage.

Walkways and hallways should be maintained free of all obstructions or impediments for use in case of an emergency.

**NOTE:**

If materials (office supplies or records) have to be stored in card board boxes, they must be piled, stacked, or racked in a manner designed to prevent them from tipping, falling, collapsing, rolling, or spreading.

**5.16 Stairways**

All stair tread surfaces shall be slip-resistant. Stairways shall be maintained clear of tripping hazards and in good repair. Stairways shall have handrails on each side. Stairways shall not be used as storage areas.

**5.17 Exit signs**

Exit signs or directional signs, or both, shall be provided at every exit door, at the intersection of corridors, at exit stairways or ramps, and at other locations as necessary to inform occupants of the means of egress available.

Exit signs that are electrically illuminated shall be lighted with at least two electric lamps. Burnt out electric lamps shall be replaced in a timely manner.



**5.18 Door openings**

Door openings should be kept clear. Doors marked "Fire Door, Do Not Block," or other special notice should not be changed or altered.

Solid doors (without windows) can present hazards because they can be approached from both sides at the same time. Employees should be warned of this hazard and instructed to:

- a) approach solid doors slowly,
- b) stay out of the path of an opening door, and/or,
- c) reach for the door knob to avoid contact with the body and arms.

Doors that open onto a hallway or open directly into the path of on-coming foot traffic should be approached slowly. The swing radius of doors can be marked on the floor.

\* \* \* \* \*

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## **PART 2. SAFETY AND HEALTH FOR OFFICE WORKERS WHO OCCASIONALLY TRAVEL**

### **PREPARING FOR FIELD TRIPS**

This information in this section applies to all employees, but its primary focus is for supervisors and employees who work in an office setting, and because of the nature of their work assignment, occasionally or routinely travel.

#### **5.20 Trip planning**

In preparation for a field trip (\*) the supervisor shall discuss the following items with his/her employee(s) before the trip begins to:

1. Define the scope of work.
2. Identify the characteristics of the work area, facility, or highway, including such things as traffic volume, number of lanes, shoulder widths, possible sites for parking, fences, gates, etc.
3. Review the Code of Safe Work Practices (\*\*) applicable to the work.
4. Discuss working on foot with the employee(s).
5. Assemble all safety equipment (PPE), materials, and other equipment that will be required to perform the work.
6. Arrange for transportation, remind employees to use seat belts and shoulder harnesses while in the vehicle.
7. Ensure that all materials are assembled and all potential hazards have been reviewed and discussed.
8. When arriving at the worksite, drive through the designated work area in the field to identify if any work is on-going, and meet with the supervisor in charge.

\* Field trips can include visiting another building or facility.

\*\* A Code of Safe Work Practices titled - FIELD TRIPS is included at end of this chapter.

See Chapter 11 - CODE OF SAFE WORK PRACTICES for more details.

---

- **WORKING ON FOOT**

Supervisors shall have pre-job discussions with employees to discuss hazards unique to the job assignment, the hazards associated with working-on-foot, or performing pedestrian type activities, and working near highway traffic.

Supervisors shall talk to employees to improve their awareness of the increasing incident of drug and alcohol impaired drivers on the highways, and instruct them to make periodic visual observations of moving traffic during their work activities.

### **5.21 Motel, hotel, dining out, and sightseeing safety**

Supervisors shall also discuss information about travel status, visiting other cities, and the potential hazards associated with being in a different working environment. Discussions should include personal safety and precautions about motel/hotel safety, dining out, shopping and sightseeing.

#### NOTE:

National media reports continue to focus attention on employees in both the public and private sector that have become victims of assaults or other forms of violent acts while working. Many of these assaults result in serious injury or fatality, or the threat of injury. It is important that managers, supervisors, and employees are aware of the potential for violence while working and what actions can be taken when an employee is confronted with an act of violence, threat, verbal or personal harassment, or intimidation.

Although limited in information about violence in the workplace, managers, supervisors, and employees are encouraged to review Chapter 6 - WORKPLACE VIOLENCE, for information that may help them understand and/or handle a situation that they may encounter while on travel status.

### **5.22 Personal clothing**

Employees are expected to report to work reasonably dressed to protect themselves during routine assignments and from exposure to usual and/or predictable physical and environmental conditions found in the work place.

Employees shall be given adequate advance notice of field trips so they may properly dress to protect themselves during the new work assignment, and/or be protected from exposure to the conditions in the new assignment.

### 5.23 Use of seat belts and shoulder harnesses

It is Departmental policy that whenever an employee operates a state-owned, privately-owned, or rented vehicle while on official state business, he/she shall wear a seat belt and shoulder harness. The Departmental policy is based on the California mandatory seat belt law as contained in the California Vehicle Code (CVC) Section 27315(d)(1), which states in part:

“No person shall operate a . . . motor vehicle on a highway unless that person and all passengers . . . are ***properly*** restrained by a safety belt.”  
(**Bold type** and *italics* for emphasis.)

This CVC section and Departmental policy means:

The driver or operator of any vehicle shall be responsible to ensure that **all passengers "BUCKLE-UP" before the vehicle is placed into operation.**

### 5.24 Visiting a construction or maintenance project

Whenever office employees are required to perform any work activity within the limits of a construction or maintenance project, they must contact the project Resident Engineer, or Region Manager before they enter the work zone and begin their work.

The purpose is to advise the engineer-in-charge (Resident Engineer) or maintenance supervisor of the reason for the visit, gain permission to enter the project or work zone and to proceed with their planned work activity.

The person-in-charge, or his/her designee, then can provide a brief orientation about safety hazards on the project and explain any particular operations, such as haul roads and detours that must be observed.

The person-in-charge may deny entry to the project if conditions warrant.

---

## **USING PERSONAL PROTECTIVE EQUIPMENT (PPE)**

This section only briefly covers personal protective equipment (PPE) and has been condensed from Chapter 12 - PERSONAL PROTECTIVE EQUIPMENT (PPE).

See Chapter 12 for specific and detailed information about each type and category of personal protective equipment, and specific Departmental and Cal-OSHA regulations covering the use of personal protective equipment.

### **5.25 Head protection**

All employees are responsible to wear hard hats during any work activity that may expose them to a head injury, and shall always wear a hard hat while working on foot near vehicular traffic.

### **5.26 Eye and face protection**

Employees who are directed to work where there is a risk of contact with flying particles shall be required to wear appropriate eye and face protection.

Employees **shall always wear** safety glasses or goggles while working near moving traffic or in highway work zones.

Employees who wear prescription corrected lenses should be provided with state-furnished safety glasses or goggles to cover their prescription eye glasses.

Only safety glasses that have approved design features of the American National Standards Institute (ANSI), standard known as ANSI Z87.1, shall be used. The "Z87.1" logo must be embossed on glasses used by Caltrans employees.

Supervisors may maintain a supply of state-furnished safety glasses or goggles in their offices as conditions warrant. Safety glasses can be obtained from District or Headquarters warehouse stock.

Contact lenses do not provide eye protection. Therefore, employees who wear contact lenses shall wear approved eye protection over their contact lenses if they are required to take a field trip, or work where there is a risk of receiving eye injuries.

**5.27 Warning Garments (Vest, Shirt, or Jacket)**

Departmental policy requires employees working on foot, and exposed to vehicular or equipment traffic, shall wear warning garments such as vest, coveralls, jacket, or shirt (button or pull-over style). The warning garments must be orange, strong yellow-green, or fluorescent versions of these colors.

- A vest of appropriate color equipped with reflective material is the standard for all Caltrans operations.
- A vest of appropriate color equipped with reflective material worn over white coveralls is required for Caltrans nighttime operations. Coveralls with reflective material conforming to the ANSI/ISEA 107-1999 standard may be used in lieu of the colored reflective vest.

Supervisors shall read Section 12.20 WARNING GARMENTS, in Chapter 12 - PERSONAL PROTECTIVE EQUIPMENT (PPE), before directing employees to leave the office and work where they may be exposed to vehicular traffic.

Employees should also read and become familiar with these instructions.

**5.28 Foot protection**

Employees are responsible to furnish their own footwear.

Whenever an employee is directed to leave his/her office and travel to a field work location, his/her normal footwear may not provide adequate foot protection. Before the trip begins, the supervisor and the employee must ensure that the footwear is acceptable for the job which he/she is being assigned and the hazards to which they may be exposed.

If an employee is going to visit a construction or maintenance work zone, he/she should wear a work shoe or boot with soles made of neolite, neoprene, crepe, rubber, or similar material which will retain a nonslip surface when wet, damp, oily, or muddy.

Unacceptable footwear for visiting a construction and/or maintenance work zone are shoes with the following features:

- sandals and slippers
- any type of loose or open weave upper
- footwear with leather soles
- open toes and/or open heels

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## **SPECIAL WORK ACTIVITIES**

This section discusses safety tips about how equipment and employees can be used to provide an extra measure of safety while working near vehicular traffic.

### **5.29 Parking and/or stopping along streets and highways**

When parking and/or stopping on the shoulder area of a highway, and the vehicle will not be used as a physical barrier, always park the vehicle as far off the paved shoulder area as possible. Choose a location carefully, so the vehicle will not affect passing traffic, and will not interfere with employee sight distances.

Where possible, park motor vehicles in a manner that will minimize exposure to moving vehicular traffic and provide a physical barrier between employees and any traffic that may enter the work zone.

### **5.30 Using physical barriers**

Whenever employees work on a highway, freeway, or city street, the work should be planned and organized to minimize exposure to moving vehicular traffic.

Employees working on foot near a highway or street should always try to protect themselves from injury by utilizing some type of physical barrier such as a motor vehicle, guardrail, a fence, or other physical barrier.

Where possible, park motor vehicles in a manner that will provide a physical barrier between themselves and any traffic that may enter the work zone.

### **5.31 Using a lookout**

When it is impractical to use barrier vehicles, guardrail or other physical barriers, a person should be assigned to act as a lookout to provide warning from errant vehicles.

A lookout is a person responsible to lookout for approaching vehicular traffic to detect any unusual vehicle movement or errant driver behavior. The exclusive duty of the lookout is to continuously observe oncoming traffic to warn other workers whenever trouble is expected. The lookout assignment should be changed frequently to maintain a high degree of alertness.

### **5.32 Working in median areas**

Employees who regularly work in an office should receive specialized training as to the hazards unique to median work areas, and working adjacent to moving highway traffic prior to working in median areas.

For work performed in a median area, the following precautions shall be taken:

1. Employees should park their vehicles within the median area where crossing the traffic lane on foot is not necessary. Exit the vehicle on the off-traffic side. In narrow medians, exit the vehicle on the side that will present the least exposure.
2. If the vehicle cannot be safely parked within the median area and the traffic lane must be crossed on foot, the following precautions must be taken:
  - (a) Wait for a break in the flow of vehicular traffic in all lanes that will allow you to cross a traffic lane.
  - (b) Do not carry any items or materials in your hands or arms that might hinder your visibility or movement.
  - (c) If the traffic volume is too heavy, wait until it is safe to cross the lanes.
3. If the work cannot be performed as planned due to high traffic volumes, the supervisor shall re-evaluate the work activity to prevent unnecessary exposure of employees to vehicular traffic.

The supervisor should contact the local Maintenance Region office or Construction office for information regarding planned lane closures or construction work in the area.



### **5.33 Amber warning lights**

Section 25256 of the California Vehicle Code (CVC) allows Caltrans vehicles to display flashing/rotating amber warning lights, ". . . when such vehicles are parked or working on the highway."

Amber lights should only be used to alert traffic of workers on foot or operations near the traveled way. Do not use the amber lights while driving, when parked in an established lane closure, or when no danger to the employee exists.

### **5.34 Night work**

Supervisor shall discuss the hazards unique to working at night. If employees will be exposed to vehicular traffic, personal protective equipment including hard hat, eye protection, foot wear, and other (cold-weather, heat stress) clothing shall be discussed and/or required.

Warning garments of appropriate color equipped with reflective material are required whenever working on-foot, within the right-of-way or near vehicular or equipment traffic. See Section 5.27 WARNING GARMENTS (Vest, Shirt, or Jacket) for details.

Employees should be given sufficient advance notice of a night work operation to allow them to adjust their schedules and avoid unnecessary fatigue.

### **5.35 Hazardous spills**

Whenever an employee discovers a spill of an unknown material or substance on a highway or street, the employee should:

1. During regular working hours, call the Maintenance Region Manager's office, if known, or the Caltrans Communications Center, or the California Highway Patrol (CHP), through 9-1-1.
2. Stay clear and "up wind" if possible, and avoid contact with the unidentified material.
3. Provide traffic control, possibly by closing a traffic lane or other traffic controls.
4. Call for assistance and wait for the experts.

If an employee determines that his/her personal safety may be in jeopardy, they should leave the area, and telephone appropriate authorities from another location.

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CODE OF SAFE WORK PRACTICES

**FIELD TRIPS**

PREPARING FOR A FIELD TRIP

**PHYSICAL AND ENVIRONMENTAL HAZARDS**

TYPICAL FIELD TRIP HAZARDS:

1. Adverse weather conditions
2. Slippery roadways
3. Moving vehicular or equipment traffic/traffic congestion
4. Hazardous parking areas
5. Noise
6. Impaired drivers
7. Footing on uneven terrain
8. Poor visibility
9. Contact with flying particles
10. Bending, stooping and lifting objects

**SAFE WORK PRACTICES**

TYPICAL PRECAUTIONS TO AVOID INJURY:

1. Review Safety Manual for fieldwork safety items
2. Wear appropriate footwear, hard hat, safety glasses, and warning garments
3. Wear appropriate personal clothing
4. Perform pre-operation inspection on vehicle
5. Bend, stoop, and lift properly
6. Obey traffic laws
7. Be alert for other motorists
8. Stop and/or park vehicle in safe place
9. Exit vehicle properly, away from traffic
10. Avoid backing vehicle if possible
11. Use physical protection from traffic where practicable such as (a vehicle, guardrail, K-rail, etc.)
12. Work facing traffic and/or use lookout
13. Wear hearing protection as required.

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# CHAPTER 6

## WORKPLACE VIOLENCE

### HOW TO DEAL WITH VIOLENCE IN THE WORKPLACE

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**WORKPLACE VIOLENCE**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 6

## WORKPLACE VIOLENCE

### HOW TO DEAL WITH VIOLENCE IN THE WORKPLACE

#### 6.00 INTRODUCTION

This chapter provides information about violence in the workplace. It explains how managers, supervisors, and employees are responsible for maintaining a safe and secure work environment by promoting work practices that have zero tolerance for violence, threats, harassment, and intimidation.

This chapter also discusses reporting, investigating, and documenting incidents of workplace violence, including incidents when an employee is a victim of a crime that may occur at a Caltrans worksite.

#### 6.01 PURPOSE

The purpose of this chapter is to provide information about procedures, techniques, and strategies that can be used as a defense against violence in the workplace.

Workplace violence includes threats and/or acts of physical violence or verbal abuse by employees, visitors, or the public, or other signs of stress, strain, or abusive conduct that demonstrates recognizable signs of violent behavior.

#### 6.02 POLICY STATEMENT

It is Caltrans policy to conduct business, provide services, and protect its employees and the public from harm by providing a safe and secure work environment that has zero tolerance for violence, threats, harassment, and intimidation.

### **6.03 TYPES OF WORKPLACE VIOLENCE**

The three major types of workplace violence are:

#### **TYPE I.**

The perpetrator has no legitimate relationship to the workplace and usually enters the workplace to commit a robbery or other criminal act. Examples of Type I events would involve liquor stores, gas stations, or a convenience food stores; businesses who handle cash late at night; clerks in hotels or motels, jewelry stores, toll collectors, or security guards.

#### **TYPE II.**

The perpetrator is either the recipient or the object of a service provided by the affected workplace or victim; e.g., the assailant is a current or former client, patient, customer, passenger, criminal suspect, or prisoner. These involve assaults on public safety and correctional personnel, municipal bus or railway drivers, health care and social service providers, sales personnel, receptionists, personnel offices, resident engineers, and other public or private service sector employees who provide professional, public safety, administrative, or business services to clients and the public.

#### **TYPE III.**

The perpetrator has an employment-related involvement with the workplace. A Type III event usually involves an assault or a threat of violence, or a physical act of violence resulting in a fatal or nonfatal injury, committed by a current or former employee, supervisor or manager; a current or former spouse or lover; a relative or friend; or some other person who has a dispute involving an employee in the workplace.

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**6.04 MAINTAIN A SAFE WORK ENVIRONMENT**

Managers, supervisors, and employees are responsible for following proper work practices and for helping maintain a safe and secure work environment by:

- being considerate and respectful of co-workers, visitors, and the public; and,
- not engaging in any disruptive behavior which may include profanity, obscenities, obscene gestures, or exhibiting abusive conduct that demonstrates recognizable signs of violent behavior.

**6.05 REPORTING WORKPLACE VIOLENCE**

Whenever an actual or alleged act of workplace violence occurs, **the first person** who becomes aware of an accident/incident shall report the incident to a supervisor, the California Highway Patrol (CHP), building security guard, or building manager immediately.

- report inconsiderate and/or disrespectful behavior, including assaultive acts, assaultive talking, belligerent, intimidating, and threatening behavior by a manager, supervisor, or employee; and
- report suspicious behavior and suspicious actions, including theft, assaultive acts, assaultive talking, belligerent, intimidating, and threatening behavior by visitors or the public that may impact an employee, equipment, or facility.

**SPECIAL NOTE:**

Refer to Chapter 19- SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS OR FATALITY, for information regarding notification procedures which can be used as a guide for reporting incidents of workplace violence at any worksite:

Chapter 19, explains:

- Chain-of-command reporting;
- Release of information, media, and family;
- Notification of family members;
- Personnel transactions research, workers' compensation benefits;
- Family visitation;
- Employee Assistance Program (EAP); and,
- Special actions for fatalities.

The **first person** aware of an incident shall take necessary precautions to ensure their safety and the safety of anyone who may be in danger.

After this is done, obtain sufficient preliminary information about the accident or incident so that the supervisor, building security guard, CHP, or building manager can be as well informed as possible during the early stages of the reporting procedures:

Obtain the following type of information:

- What happened;
- When and where the incident occurred;
- Name of the threat-maker and his/her relationship to Caltrans and the affected employee;
- Name(s) of victim(s) or potential victim(s);
- What happened immediately prior to the incident;
- The specific language of the threat;
- Any physical conduct that would substantiate an intention to follow through on the threat;
- How the threat-maker appeared (physical and emotional);
- Names of others who were directly involved and any actions they took;
- How the incident ended;
- Name(s) of witness(es);
- What happened to the threat-maker after the incident;
- What happened to the employee after the incident;
- Name of any supervisory staff involved and how they responded;
- What event triggered the incident;
- Any history leading up to the incident;

**Report workplace violence where it occurs:**

- Workplace violence which takes place on any Caltrans property, and
- Workplace violence at any location where Caltrans employees are engaged in a work-related activity.

**Reportable events:**

- Any threatened, attempted, or consummated act of violence against an employee, property, or facility must be reported.



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**Method of threat:**

- In person.
- In writing.
- Over telephone.
- Via electronic communication.

**Types of Reportable Incidents:**

- An employee is struck by another person.
- An employee is struck with another object; such as, a stapler, ruler, a book, a door, a computer mouse.
- An employee is spit upon.
- An employee receives a bomb threat.
- An employee receives a threat involving the destruction of personal or state property.
- An employee feels threatened, harassed, or intimidated by a co-worker, visitor, the public.
- A person attempts to strike an employee, to throw an object at an employee, or to hold or restrain an employee's movements.
- A person writes a threat on a Departmental form; mails or delivers a threatening letter, postcard, or note - via electronic or paper.
- A person challenges an employee to a fist fight.
- A person engages in loud, disruptive behavior which may include profanity, obscenities, or obscene gestures.
- A person purposely damages an employee's vehicle while the employee's vehicle is parked in the state parking lot.
- A person purposely damages an employee's personal property; calculator, purse, shoes, clothing, flower pot.
- A person purposely damages an office wall, kicks the door and breaks the glass, or causes other damage to state property.

All incidents of verbal or written abuse must be reported when an employee feels threatened, provoked, or intimidated by the incident, or when the person making the statement or comment intends for their conduct to be perceived as a threat.

## 6.06 HOW TO PREVENT WORKPLACE VIOLENCE

The following items represent a variety of procedures and work practices that will help prevent workplace violence and promote a safe and secure work environment:

- Foster a supportive, harmonious work environment. Promote mutual respect, help reduce harassment and hostility in the workplace.
  - > This is best achieved by starting each day with a positive mind-set with your staff and co-workers.
- Educate managers, supervisors, and employees that they are to be aware of the warning signs of potential workplace violence.
  - > This is best achieved by all employees being alert to acts of violent behavior, such as verbal abuse, and/or physical threats, harassment, and intimidation.
- Communicate openly and give employees support and recognition.
  - > Talk to your employees; tell them what a good job they are doing.
- Control access to the workplace and freedom of movement within the workplace for recently discharged employees, or persons with a dispute with one of our employees.
  - > Managers and supervisors shall alert building security personnel, CHP, other supervisors, or building management personnel, of the name of person(s) who may qualify for access control.
- Managers and supervisors shall initiate appropriate counseling and/or corrective action whenever employees exhibit such behavior and follow progressive disciplinary procedures:
  - > Contact the Personnel Office for assistance:
    - counseling and verbal warning,
    - informal memorandum of warning, and/or
    - formal adverse action (suspension and/or termination).

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## 6.07 KNOW THE WARNING SIGNS

There is no exact method to predict when an employee or other person will become violent. However, before violence occurs, one or more of the following signals may be displayed.

These warning signs do not mean that the individual will actually be violent, but in combination they should be a cause for concern. An employee may exhibit all or some of the following:

### Erratic work patterns

Alternating periods of high and low productivity may indicate substance abuse or alcohol abuse. Monitor degrees of productivity to see if there is a pattern.

### Substandard work relationships

Warning signs include: belligerent behavior, problem with authority figures, doesn't cooperate with others on work assignments, overreaction to criticism, mood swings, and/or verbal harassment of others.

### Decline in productivity

Be aware of any employee with a satisfactory performance record in the past whose work performance suddenly changes or deteriorates.

### Continual excuses and blame

Blames others for his/her problems. Inability to accept responsibility for even the most minor of errors.

### Concentration problems

A troubled employee is usually distracted and often has difficulty recalling work instructions, project details, and/or deadline requirements.

### Attendance problems

Excessive sick leave or tardiness, leaving work early, peculiar or improbable excuses for absences, higher absentee rate than other employees, and/or leaving the worksite without notice.

### Safety and health issues

Ignores well-known safety and health policies, procedures, and work practices: is more accident-prone.

### Careless health and hygiene

Marked deterioration in personal grooming habits is a warning sign of internal conflict.

Unusual or changed behavior

This can include emotional outbursts, physical violence such as hitting a wall or piece of equipment, inappropriate remarks or threats, and/or delusional statements (such as the end of the world, being spied on), demonstrating extreme, bizarre, and/or secretive behavior.

Evidence of possible drug or alcohol abuse

Employee may act secretly around his/her workspace, meet other employees or visitors in remote areas, or take long lunch periods.

Evidence of serious stress in the employee's personal life

Crying, excessive personal phone calls, bill collectors, recent separation, or death of loved one.

Depression

Demonstrates depressed behavior for long periods of time, appears depressed and stressed, has low energy, little enthusiasm, and expresses despair.

Fascination with guns and weapons

Talks frequently about guns and obsessed with the power of guns and weapons. May have a history of violence.

Threats

Sometimes employees will make statements that are easily recognizable threats. These are clear indicators that a violent act may follow. There are three types of threats:

- **direct threat:** "I'm going to get even for that."
- **veiled threat:** "I could shut this place down."
- **conditional threat:** "If I'm fired, they'll all pay."

Potentially violent employees may not always exhibit all of the signs. Do not stereotype employees. It is important not to make premature judgements about employee behavior. Sometimes employees may just have a bad day and may appear frustrated; that does not mean he/she will become violent.

**6.08 DEALING WITH VIOLENT PEOPLE**

As situations arise, managers, supervisors and employees should stop to evaluate incidents that may contribute, or appear to contribute, to acts of violence. Listen to and observe employees and visitors who may exhibit disruptive behavior including profanity, obscenities, or obscene gestures, or exhibit abusive conduct that demonstrates recognizable signs of violent behavior.

Use the following methods to defuse the situation:

- Talk the person who is exhibiting recognizable signs of violent behavior into calming down.
- Ask the person what you can do to help him or her.
- Make sure they know you understand their position by re-stating what it is they are upset about.
- Focus on the behavior and not the person.
- Stay calm, listen and watch how the person responds to you talking about the situation.
- Try to put some space between yourself and the perpetrator.
- Try to control your emotions.
- Empathize and sympathize with the person.
- Ignore sarcastic remarks and personal attacks.
- Don't argue with the person.
- Explain to the person things you can do to help.
- Don't accuse the person of wrong doing.
- Call for help when necessary.
- Call 911 if there is an immediate danger.

DO NOT:

- Try to outshout the other person.
- Make any aggressive movement.
- Argue with the other person.
- Risk your own safety.

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**6.09 EMPLOYEE CONDUCT AND DISCIPLINE**

Managers and supervisors are responsible to enforce safety and health policies, procedures and work practices, and be aware of the penalties and levels of discipline for violating the Department's zero tolerance for violence in the workplace.

Managers and supervisors shall initiate appropriate corrective action, including termination from state service for employees who contribute to, or perpetuate workplace violence or violate workplace security requirements.

Managers and supervisors shall consistently monitor the actions of their staff, and whenever any incident relating to workplace violence occurs, it shall be dealt with immediately.

NOTE:

Managers and supervisors must recognize that, while behavioral and emotional problems associated with acts of workplace violence will justify corrective action, they often indicate the need for professional counseling as well.

Discuss the Employee Assistance Program (EAP), including self-referral, and/or make a management referral for employees who may need professional counseling services.

Contact the Headquarters or District Office of Safety and Health EAP coordinator for assistance.

**6.10 MEDICAL TREATMENT AND MEDICAL FORMS**

Managers and supervisors are responsible to ensure that first aid and medical supplies are readily available to provide temporary medical aid to injured employees.

Whenever an injury occurs, the supervisor's first obligation is to arrange for first aid or other medical treatment and/or prompt transportation to the nearest medical clinic or hospital.

Whenever an employee is injured at the workplace, injury/accident reports, medical treatment authorization, and workers' compensation benefit forms must be completed.

See Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT for details covering first aid care, transportation, and medical care, and Chapter 10 - REPORTING PERSONAL INJURIES AND ILLNESSES for details covering the reporting documents.

**NOTE:**

- **Eligibility for workers' compensation for employee(s) who is victim of a crime that occurred at place of employment**

Section 3553 of the Labor Code requires management to, “. . . give any employee who is a victim of a crime that occurred at the employee's place of employment written notice that (he or she) is eligible for workers' compensation for injuries, including psychiatric injuries, that may have resulted from the place of employment crime.”

The notice must be given, either personally or by first-class mail, within one working day of the place of employment crime or within one working day of the date the employer reasonably should have known of the crime.

Supervisors, with the assistance of the Headquarters or District Safety and Health Offices and the Workers' Compensation Case Managers, shall ensure that the affected employee is notified about this policy.

As a general rule, notification should be given to:

- 1) the injured employee(s),
- 2) the employee(s) directly involved, but uninjured; and
- 3) the employee(s) at the worksite.

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**6.11 INVESTIGATE AND DOCUMENT INCIDENTS OF WORKPLACE VIOLENCE**

All incidents of workplace violence shall be investigated and documented by the first-line supervisor. Second-line supervisors shall review the findings of the investigation and assist in resolving the problem(s).

An investigation of the incident should be made as soon as possible. A delay of only a few minutes may cause important information or evidence to be lost. When conducting an investigation, the information collected must be reliable, accurate, and have sufficient detail to make an informed decision.

Start the investigation with the incident scene. Reconstruct the events that led up to the incident. Get a list of witnesses. Where were they and what did they see or hear. Interview the employee directly involved.

The following information lists a variety of subject areas that should be considered in a workplace violence incident investigation:

- > **Work characteristics:**  
What is the type of work activity and the size of the operation?  
How many employees are involved? Too many, too few?
- > **Time factors:**  
The time of day and how it relates to the shift - whether first hour or last, swing shift, straight eight, or rotating. The phase of the employee's work: performing work, rest period, lunch period, overtime, entering or leaving the work site, building, or office.
- > **Employee characteristics:**  
What is the victim's age, health, sex, and work experience?  
How often is the work activity repeated? How often has the employee engaged in such work? How much training and when was the last training?
- > **Characteristics of the task:**  
The general task being performed (repairing a wing plow).  
A specific activity (typing a budget report on a computer).  
The posture and location of employee (walking into an elevator).  
Working alone or with others (in an office, on a roadway).



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The supervisor shall also:

- > Review the record for previous incidents,
- > Visit the scene of the incident as soon as possible,
- > Interview threatened or injured employees and witnesses,
- > Inquire about any previous reports of inappropriate behavior by the employee/perpetrator,
- > Attempt to determine the cause of the incident,
- > Take corrective action to prevent the incident from recurring, and
- > Record the findings and document the corrective action.

Do not change anything at the scene where the incident took place; and do not clean up, reset furniture, or touch any objects.

See Chapter 4 - ACCIDENT INVESTIGATIONS AND ANALYSIS for information about conducting, documenting, and analyzing incident/accident investigation scenes.

Chapter 4 provides two (2) accident investigation report forms.

### **6.12 EMPLOYEE ASSISTANCE PROGRAM (EAP)**

The Employee Assistance Program (EAP) is an employee benefit to help employees resolve problems which may affect work performance through counseling and referral for employees and their families.

EAP is for employees who may show signs of struggling with a personal, a work-related problem, and for employees who may exhibit recognizable signs of violent behavior.

Supervisors should call the EAP coordinator whenever they need assistance in resolving an employee problem, and/or advice or guidance when planning a meeting with an employee to discuss performance problems.

An employee can obtain assistance through self-referral, informal referral by his/her supervisor, and/or formal supervisory referral to the EAP.

EAP counseling is available to those employees affected by traumatic incident at the workplace. Managers and supervisors are responsible for arranging this service by contacting the District or Headquarters Safety and Health Office.

Supervisors should ensure that employees are given a copy of the "Employee Assistance Program" pamphlet and have a copy of the Employee Assistance Program "Supervisor's Handbook."

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**WORKPLACE VIOLENCE**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 7

## ERGONOMICS

### EMPLOYEES AND THEIR WORK ENVIRONMENT

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JULY 1996

ERGONOMICS

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**ERGONOMICS**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 7

## ERGONOMICS

### **EMPLOYEES AND THEIR WORK ENVIRONMENT**

#### **7.00 INTRODUCTION**

“Ergonomics” is defined as the study of physical and behavioral interaction between humans and their environment.

This chapter discusses ergonomics in relation to the selection of furniture and equipment, position of the individual in relation to the work, arrangement of workstations, the proper use of video display terminals (VDT), and methods to reduce personal injury and occupational illnesses associated with computers.

#### **7.01 PURPOSE**

The purpose of this chapter is to introduce and promote an ergonomics program in which the work environment, including the position of tools, furniture and equipment, is compatible with the physical and behavioral limitations of the employee.

#### NOTE:

Please refer to the “Computer User’s Handbook” published by the Department of Personnel Administration (DPA), for supplemental information covering general industry safety guidelines that promote safe workstations for employees who work at computers.

#### **7.02 POLICY STATEMENT**

It is Caltrans policy to maintain an effective ergonomic program by selecting furniture and equipment, and arranging workstations, that will reduce health risks and personal injury in the workplace.

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### 7.03 DEFINITIONS

1. **ADMINISTRATIVE CONTROLS** - Includes efforts to redesign workstations, adjustment of work space, changes in work assignments, changes in work schedules and work duties. It also includes limiting worker exposure, measuring performance, training, housekeeping, and maintenance.

2. **CUMULATIVE TRAUMA DISORDER (CTD)** - Any physical disorder that develops from or is aggravated by cumulative stress to tissues and joints. A Cumulative Trauma Disorder (CTD) is a personal injury caused by repetitive motion.

3. **CUMULATIVE TRAUMA DISORDER (CTD) RISK** - The presence of work activity factors such as:

Frequency - The rate at which specific physical motions or exertions are repeated.

Force - Physical exertion by or pressure applied to any part of the body.

Duration - The length of a period of work which poses a CTD risk.

Posture - The position of a body part during work activity.

Exposure - Exposure to localized or whole-body part, including hands and feet, to cold temperatures which cause discomfort.

4. **ENGINEERING CONTROLS** - Includes devices such as adjustable workstations, tables, chairs, equipment, keyboard, and tools; or physical modifications to workstations, equipment, tools, production processes.

5. **PERSONAL PROTECTIVE EQUIPMENT (PPE)** - Items worn on or attached to the body for protection; i. e., cloths, padding, gloves, devices, or equipment.

6. **VISUAL DISPLAY TERMINAL (VDT)** - Any device used or set of devices with keyboard and cathode ray tube or other electronic device for entry or display of data, words, numbers, and symbols.

7. **VDT OPERATOR** - An employee who routinely works at a VDT or any other aspect of the work.

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## 7.04 WORKSITE EVALUATION

Each employee has unique anthropometric or physical characteristics: height, weight, reach, strength, sight, and hearing. A worker also brings individual work methods and style, such as lifting techniques, and some times unique ways of performing a task.

Worksite evaluation takes into consideration all of the anthropometric characteristics of an employee and attempts to match the employee to his/her work activity through the use of ergonomic principals.

The objective of worksite evaluation is to identify health risks in the workplace. Supervisors should look for work activities that are especially prone to CTD risk.

The following list includes some of the high risk activities that are likely to cause CTD and require evaluation:

1. Repeated use of the same tool or similar tools in activities.
2. Repetitive keystroking, which consists of manually striking or pressing a data-entry device such as a keypad or button.
3. Repetitive processing of items such as: assembly, cutting, trimming, packing, loading, mail handling, or auto repair.
4. Routine use of a mechanical or electronic device; e.g., chainsaw, hand drill, power tools.
5. The interval between repetitive motions and exertions, or between periods of repetitive activity, which is needed to prevent fatigue of the body parts performing the activity.
6. The presence of vibration while performing repetitive activity.
7. Exposure of fingers and toes to cold temperatures while performing repetitive activity.

Where repetitive activity is present, the high risk activities listed above can occur together. It is essential to identify each separately to ascertain which are the most hazardous and how each can be reduced.

Supervisor should initiate an inquiry into the employee's allegation whenever an employee discusses or reports that they are experiencing discomfort associated with his/her work, workstation, equipment, tool, new product, or new operation.

## **7.05 CONTROL INTERVENTIONS**

Control interventions are methods and strategies that can be introduced into the workplace, work activity, or process to reduce CTD risk.

Supervisors, with the assistance of the safety and health staff, should consider using control intervention whenever possible.

Engineering controls are aimed at eliminating the source of the ergonomic problem through engineering and design. Such factors as lowering or raising worktables, reorganizing the work process, and reducing hand forces can reduce CTD risk.

Administrative controls consist of early intervention in reviewing proper work practices, correctly matching workers to job demands, and other job considerations. The disadvantage of administrative controls is that they treat symptoms and not the cause of ergonomic problems.

Personal protective equipment for use in ergonomic situations is very limited. Splints, for example, shall not be used unless under the advice of a licensed physician or chiropractor. Other personal protective equipment used in ergonomic situations are back belts or lumbar supports. All of these items require approval by a licensed physician or chiropractor.

## **7.06 WORK AREA DESIGN**

Work areas should be based on body dimensions using the following principles:

- **HEAD HEIGHT:** allow for tallest worker and natural posture.
- **ELBOW HEIGHT:** adjust normal work surface to just below elbow height.
- **ARM REACH:** allow for shortest employee when reaching up or out; allow for tallest worker when reaching down.
- **LEG LENGTH:** allow for long legs; provide adjustment or footrests for shorter legs.
- **BODY BULK:** allow for largest worker, remember to consider varying girth and clothing bulk.



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## 7.07 WORKING HEIGHTS AND CHAIRS

Working heights and chairs are the most common problems in workstation design.

The most favorable working height for handwork while standing is 2 to 4 inches below elbow level. On average, working heights of 37 to 39 inches will be convenient for men, and 35 to 37 inches for women. Besides these anthropometric considerations you also must allow for the nature of the work:

1. For delicate work; e.g., drawing, it is desirable to support the elbow.
2. For standing work, if it involves much effort and makes use of the upper part of the body; e.g., mailing/file handling, the working surface needs to be lowered to 6 inches to 16 inches below elbow height.

The following guidelines will help ensure the best match between chair and worker:

1. Office chairs must be adapted to both the traditional office job and the modern equipment at VDT workstations.
2. The chairs must accommodate both forward and reclined sitting postures.
3. The backrest should have an adjustable inclination and should be possible to lock the inclination at a desired position.
4. The backrest should have a well-formed lumbar support.
5. The seat surface (seat pan) should measure 15 to 18 inches across and 15 to 17 inches from back to front.
6. The chair must have adjustable height, swivel, rounded front edge, casters or glides, five-leg base, and user-friendly controls.

---

## 7.08 LIGHTING

Glare is the reflection on your VDT screen that makes it hard to see the screen clearly. Glare can be caused by sunlight on your screen, or by inside light, such as overhead and task lamps. Simple lighting adjustments can help minimize and reduce eyestrain and headaches.

- Position the screen so that it is at right angle to the window producing the glare.
- Close shades, curtains, or blinds, if necessary, as light changes during the day.
- Tilt the VDT screen down slightly to avoid overhead light from producing glare.
- Sit with ceiling lights at sides rather than directly overhead.
- If you use a task lamp, position it to aim the light at your document instead of your screen.
- To help improve your viewing comfort, you may also need to adjust your display screen's contrast and brightness moods.
- Periodically clean your screen to maximize clarity. Font characters on the screen should be clear, stable, and free from perceptive flicker.
- Consider attaching a glare shield to the VDT screen if you are unable to eliminate the glare by other means.

---

## **7.09 BACK CARE, SAFE LIFTING, AND BACK BELTS (LUMBAR SUPPORT)**

Lifting is the most common task associated with low-back injuries. Back injuries are caused from overexertion, either sudden or cumulative. Improper lifting causes low-back injury, while repeated trauma to the arms and hands - shoulder to fingers cause CTD. The most effective means of minimizing back injuries is through training on proper lifting techniques.

The following techniques should help reduce the risk of low-back injury:

### **BEFORE YOU LIFT**

- Always warm up before you lift any load to prevent muscle strains and pulls.
- Stretch your back with upward reaches and continue to loosen tight muscles with simple side and back bends.

### **LIFTING SAFELY**

- Use mechanical assistance whenever possible.
- Roll, push, or pull the object to its destination.
- Redesign the task to eliminate lift.
- Let your abdomen, legs, and buttocks do the work.
- Get close to the load. Grab the load safely with your hands placed under the object.
- Bend your knees, with feet slightly spread, for balance and stability.
- Keep your head, shoulders, and hips in a straight line as you lift.
- Do not twist.
- Reverse these steps when you set a load down. Move slowly and smoothly without twisting.
- To change direction of carry, do not twist. This is crucial when doing repetitive lifting. Turn your entire body, including your feet.
- Never lift from a sitting position. Sitting puts more pressure on the spine. Stand before you lift.
- Push rather than pull a load.
- When the object is too heavy for one person to lift, admit it, then get help.

### **KEEP THE PATH CLEAR**

- Look at the move before you lift and clear the path you plan to follow.
- If you can't see over the load, don't carry it.
- Use mechanical help (pushcart, handtruck, wheelbarrow) if the load is heavy or bulky.
- Know where the load/item is to be placed.

NOTE:

It is Departmental policy that back belts shall not be purchased as personal protective equipment.

**SPECIAL NOTE ABOUT BACK BELTS:**

The National Institute for Occupational Safety and Health (NIOSH) does not recommend the use of back belts to prevent injuries among uninjured workers, and does not consider back belts to be personal protective equipment. NIOSH further concludes that there is insufficient data indicating that typical back belts significantly reduce the biomechanical loading of the body (trunk) during manual lifting.

Also, there is insufficient scientific evidence to conclude that wearing back belts reduces risk of injury to the back based on changes in abdominal pressure and trunk muscles, and the use of back belts may produce temporary strain on the cardiovascular system.

Back belts may be purchased only for employees who have a doctor's prescription specifically indicating that the employee should use a back belt for specific work activities.

**7.10 WORKSTATION DESIGN ILLUSTRATIONS**

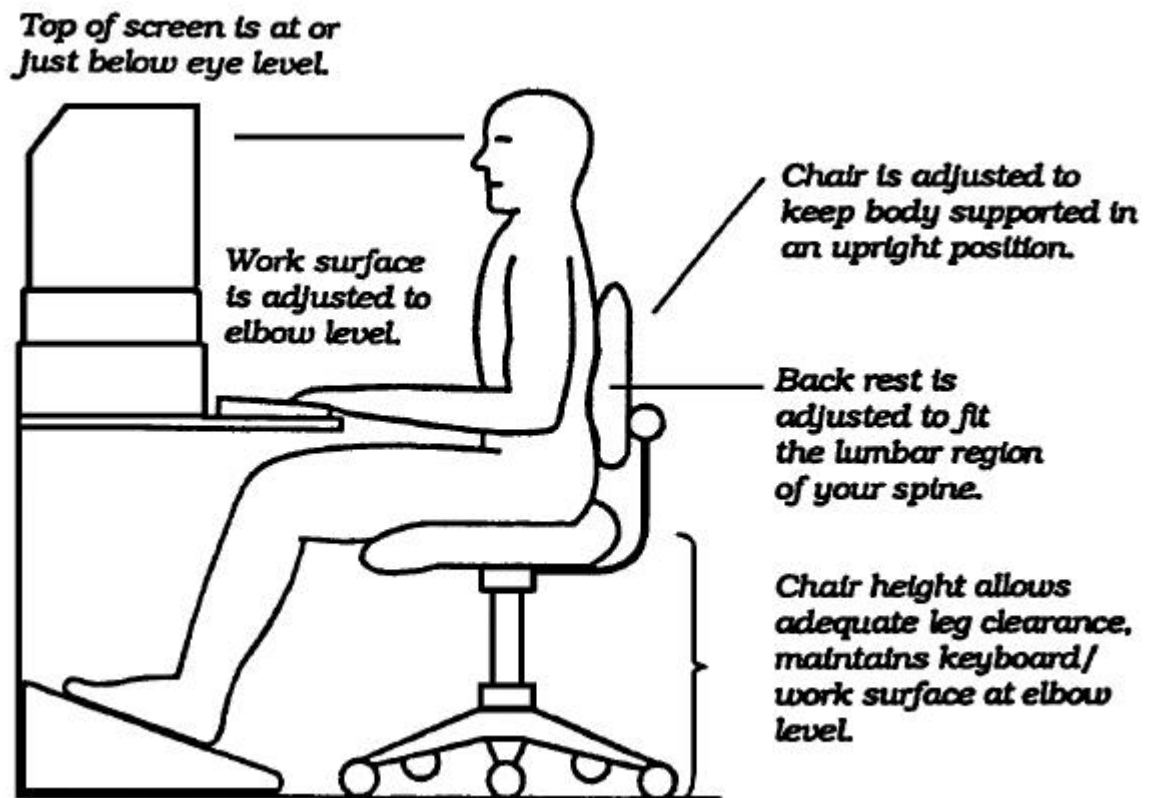
The following workstation design illustrations represent guidelines that promote safe workstations for employees who work at video display terminals (VDT). These illustrations cover most of the principals of ergonomics necessary for workstation design and personal comfort.

Proper VDT use, including proper posture and workstation adjustments with careful attention to muscle and eye fatigue, will help prevent musculoskeletal and visual problems.

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**ADJUSTING YOUR CHAIR AND WORKSTATION**

- Adjust lumbar (lower back) support by moving the back rest up or down to match the inward curve of your spine.
- Adjust the tilt of the back rest and/or seat to keep your body supported in an upright position.
- Adjust the seat height for adequate leg clearance under the workstation and keep the keyboard at approximately elbow level.
- Adjust your monitor so that the top of the screen is at or just below eye level and is a viewing distance of between 18" and 24".
- Use a document holder that places the documents at the same height as the monitor.

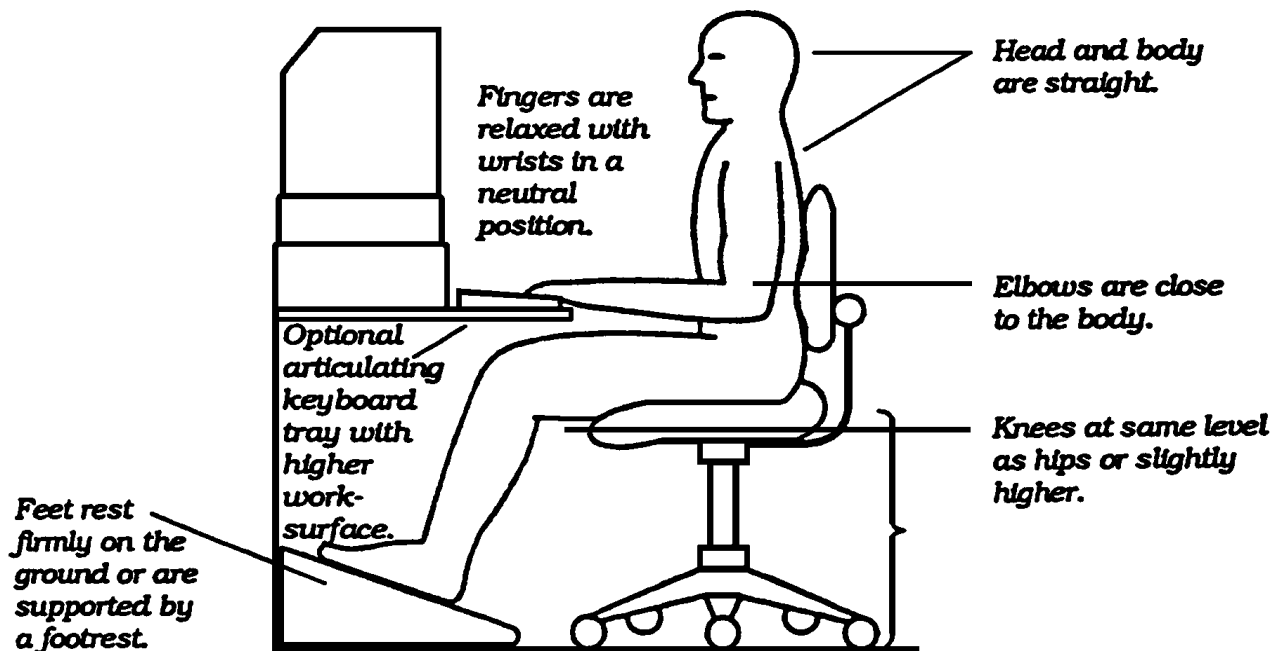


Note: Reassess your workstation periodically.

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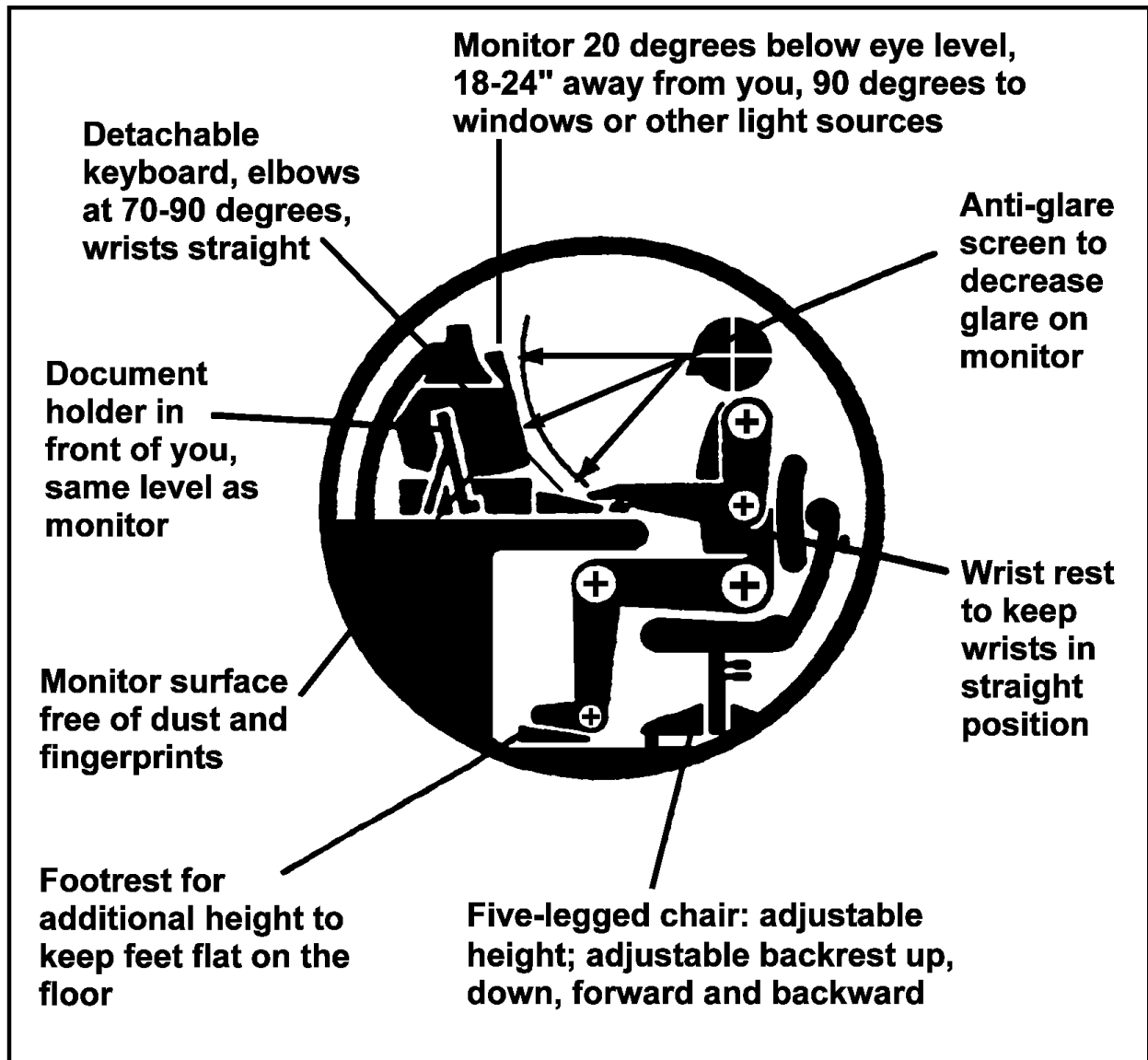
**PROPER BODY POSTURE**

- Keep your head in line with your shoulders and hips
- Keep elbows close to your body
- Keep wrists in a neutral position; bent no more than 10° up or down
- Keep your knees at the same level as your hips or slightly higher
- Keep feet flat on the floor or supported by a footrest
- A keyboard tray for fixed work surfaces and padded wrist rests can be used to help support the wrists in a neutral position
- Keep fingers in a relaxed position when working
- Avoid extreme finger extensions



Note: Reassess your body posture periodically.

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**WORKSTATION LAYOUT**

JULY 1996

ERGONOMICS

7-14

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**ERGONOMICS**

**THIS SPACE AVAILABLE FOR NOTES:**



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# CHAPTER 8

## GENERAL HEALTH, MEDICAL, AND SAFETY

### **HEALTH, MEDICAL, AND SAFETY RELATED ISSUES FOUND IN THE WORKPLACE**

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	<ul style="list-style-type: none"><li>• Emergency action plans</li><li>• Evacuation routes</li><li>• Emergency lighting</li><li>• Fire extinguishers</li><li>• Workplace violence</li><li>• Employee crime victims</li></ul>

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# CHAPTER 8

## GENERAL HEALTH, MEDICAL, AND SAFETY

### HEALTH, MEDICAL, SAFETY, AND ENVIRONMENTAL ISSUES FOUND IN THE WORKPLACE

#### 8.00 INTRODUCTION

This chapter presents information about personal health and safety issues, and unique environmental health issues not generally associated with specific safety and health regulations covered in other chapters of this manual.

#### 8.01 PURPOSE

The purpose of this chapter is to provide a source of information about Departmental policies, procedures, and work practices that do not fall under commonly known regulations and/or standards.

#### 8.02 BACKGROUND

The policies, procedures, and work practices presented in this chapter are based on a variety of sources including; Directors Policy Directives, Deputy Directives, Governor's Executive Orders, Department of General Services Management Memos, Department of Rehabilitation - The Americans With Disabilities Act (ADA), State Administrative Manual (SAM), and information from the State Department of Health Services, and the State Medical Officer. Additional information has been obtained from county departments of health and agriculture, and/or college or university publications.

\* \* \* \* \*

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### 8.03 SMOKING POLICY

- **Smoking is prohibited in Caltrans buildings and vehicles.**

Deputy Directive Number DD-06, Revised 5-1-94, established the following smoking policy:

Smoking is prohibited in all State-owned or State-leased space within a building and within fifteen feet of doorways and air intake structures. Smoking is prohibited in all State-owned or leased vehicles and equipment. Private vehicles used for State business must be smoke-free, anytime a non-smoker is a passenger.

Specific outdoor smoking areas are not established but appropriate smoke litter receptacles should be provided outside State-owned or leased buildings. Signs are clearly posted, as needed, to inform employees and the public about smoking prohibitions.

Caltrans' residential tenants are permitted to establish a smoking policy within their primary residential space but are encouraged to maintain Caltrans' no smoking policy.

This policy is based upon guidelines established by Department of General Services' Management Memo's 93-30, 93-40, 94-02, 95-09 regarding smoking policies derived from Governor's Executive Order W-42-93 and Assembly Bill 291.

State building means a building owned and occupied, or leased and occupied by the State.

Within a building includes any area enclosed by the outermost walls of the building, such as, atriums, balconies, stairwells, and similar building features.

Residential space means a private living area and excludes common areas, i. e., lounges, and rest rooms that are a structural part of a building such as a dormitory.

Vehicles and equipment mean any motor vehicle as defined in Section 415 of the California Vehicle Code (CVC). The prohibition also includes all state owned mobile equipment including light and heavy duty trucks, cargo and passenger vans, buses, and any other mobile equipment with an enclosed driver/passenger compartment regardless of ventilation.

Managers and supervisors are expected to enforce this policy and initiate appropriate disciplinary action whenever they observe any violation.

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**8.04 FIREARMS AND WEAPONS POLICY**

- **It is illegal for any employee or member of the public to bring a firearm or weapon into a Caltrans building or vehicle.**

Deputy Directive Number DD-22, effective 6-3-94, established the following firearms and weapons prohibition policy based on Section 171b of the California Penal Code:

“It is illegal for any employee and/or member of the public to bring into or possess firearms or dangerous weapons in a state or local public building and in Caltrans vehicles”.

The policy applies to all Caltrans-owned buildings, leased spaces, including space within buildings shared with other departments or agencies, Caltrans vehicles and motorized equipment, and Department of General Services fleet vehicles used by Caltrans employees.

Prohibited weapons include, but are not limited, to the following:

1. Any firearm loaded or unloaded.
2. Dangerous weapons including switchblade knives, clubs, metal knuckles, etc. (A complete list is contained in Penal Code Section 12020.)
3. BB or pellet guns, CO2 or spring action, spot marker or paint guns.
4. All knives with a fixed or fixable blade exceeding 4 inches.
5. Tear gas weapons, taser guns, or stun guns. (Includes pepper spray and mace spray, or similar tear gas type spray devices.)

In the event there is credible information that a person is in violation of this policy, notify your supervisor, building manager, or building security guard. The building manager and/or security personnel should contact the California Highway Patrol (CHP) or local law enforcement agency as may be deemed necessary. Employees should refrain from attempting to retrieve or confiscate weapons.

NOTE:

Questions regarding this policy should be directed to the Chief, Operations Security Program in the Administrative Service Center in Sacramento.

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**8.05 USE OF BICYCLES**

Bicycles may be used for transportation on Official State business and employees may be reimbursed for using their privately-owned bicycles.

Employees who use bicycles on State business shall comply with the following safety and health guidelines.

State-owned and privately-owned bicycles shall have appropriate safety equipment as required by the California Vehicle Code (CVC), and stated in Division 11 Rules of the Road, and other divisions as required. The safety equipment shall include brakes, reflectors, and headlamp if operated during hours of darkness.

Supervisors shall ensure that all employees who operate a bicycle on State business possess reasonable knowledge and understand the provisions of the California Vehicle Code governing the operation of a bicycle upon the highways, the knowledge and understanding of traffic signs and signals, including the bikeway signs, pavement markings and delineation, and traffic control devices as established by Caltrans.

Employees who are authorized to use a bicycle for official State business shall use appropriate personal protective safety equipment as directed by his/her supervisor.

Personal protective safety equipment shall include an approved bicycle helmet, vest, shirt, or jacket of appropriate color equipped with reflective material for periods of darkness, safety glasses, and other appropriate bicycle safety apparel. See Chapter 12 PERSONAL PROTECTIVE EQUIPMENT (PPE), Section 12.20 WARNING GARMENTS, for details.

When a privately-owned bicycle is used in the conduct of official State business, the employee will be allowed to claim reimbursement as provided for in the Department of Personnel Administration (DPA) Rule 599.627(c).

The Accounting Program Manager may require an employee to file Form 0205A, AUTHORIZATION TO USE PRIVATELY-OWNED VEHICLES ON STATE BUSINESS, to ensure reimbursement for authorized bicycle travel expenses. A sample of the form is shown at the end of Chapter 17 - MOTOR VEHICLE SAFETY.



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## **8.06 EMERGENCY ACTION PLAN REQUIREMENTS FOR ALL WORK LOCATIONS**

- **Introduction**

The General Industry Safety Orders, Section 3220 - EMERGENCY ACTION PLAN, requires all Caltrans facilities, including leased or rented space, to have written emergency action plans available that establish a continuous state of readiness and preparedness for protection of employees during emergencies.

Facility managers and/or building managers are responsible to develop emergency action plans annually.

- **Content and scope of emergency action plans**

The purpose of emergency action plans is to provide easy-to-follow written instructions that protect employees during emergencies, and shall contain the following minimum requirements:

- emergency evacuation route assignments;
- a distinctive signal for alarm purposes;
- procedures to account for all employees\* before and after evacuation;
- procedures for those who remain to operate critical plant equipment;
- an established fire alarm system (may be an alarm or a procedure);
- procedures to respond to incidents of workplace violence; and,
- procedures to respond to personal injury associated with incidents of crime in the workplace.

Emergency action plans should also include details showing the location of:

- |                                  |                            |
|----------------------------------|----------------------------|
| • medical and first aid supplies | • evacuation routes        |
| • handicap facilities            | • emergency lighting       |
| • fire extinguishers             | • shelters, if appropriate |
| • command center, if appropriate | • hazardous materials      |

Building Managers shall distribute copies of emergency action plans covering each building under their jurisdiction to all supervisors, managers, and individuals who are assigned specific duties such as emergency coordinators, work area monitors, or first aid response team members.

\* Provisions for emergency preparedness and evacuation procedures for persons who may need special assistance, and persons with disabilities is included in Section 8.07 below.

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- **FIRE EXTINGUISHERS**

Caltrans policy covering the use of portable fire extinguisher is as follows:

Employees are not required to fight fires and should evacuate the building immediately in case of a fire. Employees may use fire extinguishers to fight small, incipient stage fires only if they have been trained in the proper use of a fire extinguisher and are confident in their ability to cope with the hazards of a fire. In any case, fire fighting efforts must be terminated when it becomes obvious that there is danger of harm from smoke, heat, or flames.

**1. ONLY TRAINED PERSONNEL SHOULD ATTEMPT TO EXTINGUISH A FIRE.**

**2. TRAINED EMPLOYEES SHOULD ONLY ATTEMPT TO EXTINGUISH SMALL FIRES THAT CAN SAFELY BE CONTAINED.**

**3. EMPLOYEES SHOULD NOT ATTEMPT TO EXTINGUISH A FIRE THAT MAY PLACE THEM IN PHYSICAL DANGER.**

- In case of a fire, immediately call the Fire Department - 9 1 1 or other appropriate number.
- If a decision is made to attempt to contain a fire, someone must always call the Fire Department first.
- Do not wait until the fire is out of control before calling for help.

Supervisors and District/Headquarters building managers are responsible to ensure that portable fire extinguishers are properly located, maintained, and inspected in compliance with applicable local and/or State fire regulations. Fire extinguishers should be located in areas that:

- provide uniform distribution;
- are accessible and visible;
- are free from blockage by storage and equipment;
- are near normal paths of travel;
- are near entrance and exit doors, and
- are free from potential physical damage.

Emergency action plans should include information about the particular alarm system that may be in-place at a facility and what employees can expect when the alarm is activated.

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**8.07 EMERGENCY ACTION PLAN AND EVACUATION REQUIREMENTS  
SPECIFICALLY FOR THE AMERICANS WITH DISABILITIES ACT (ADA)**

- **Introduction**

This section provides information for facility managers and building managers about maintaining a continuous state of readiness to protect persons with disabilities and others who may need special assistance during an emergency.

This section also provides instructions for supervisors and emergency response team members about carrying out emergency evacuation procedures.

These instructions are based on standards established by the Americans With Disabilities Act (ADA) which requires every employer to provide for and recognize that persons with disabilities and others may need special assistance during emergencies.

- **Purpose**

The purpose of this section is to provide information unique to persons with disabilities and others who may need special assistance during an emergency.

This section discusses detection of emergencies, methods of notification, and evacuation procedures and classifications of disabilities established by the Americans With Disabilities Act (ADA), and offers suggested techniques to assist persons during an evacuation.

Personnel who develop and write emergency action plans for persons with disabilities must understand that each person's capabilities and limitations are unique. To be most effective each emergency action plan must be designed to meet the needs of the individual.

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- **Action Steps for Evacuation Procedures**

To provide for safe evacuation of persons with disabilities, and others who may need special assistance during an emergency, the following action steps shall be included in all emergency action plans:

**DETECTION:** Detection is the action step for discovery of an emergency to provide adequate notice for safe and timely evacuation.

The detection of emergencies is generally accomplished by automatic alarm systems which usually include an audible alarm, a “public address”, and PA system, while others may be initiated by whistles, alarms, horns, etc.

Another method is the use of manual pull stations which generally include a “In Case of Fire Break Glass” device as part of the alarm system. Whatever detection system is used, it must accommodate persons with physical and/or mobility impairments.

In order to include provisions for persons with disabilities, facility managers must consider contingencies in their emergency action plans about the discovery of an emergency to accommodate persons with special needs.

**NOTIFICATION:** Notification is the action step to notify all employees of an emergency and that evacuation to a predetermined point of safety must begin.

Traditionally, notification of an emergency by an audible alarm is usually sufficient to evacuate a building. However, employees with hearing impairments may need alternative alarm methods. Alarm systems should not only be audible but visible as well, using flashing lights or similar visual devices to help hearing impaired persons to evacuate.

To provide for their notification and assistance in emergency action plans facility managers and supervisors must be informed as to the locations where employees with hearing impairments work before an emergency situation exists.

**EVACUATION:** Evacuation means that people must be able to exit a building to protective exitways safely. Evacuation procedures must accommodate persons with disabilities: mobility, hearing, sight, or temporary disabilities.

The greatest range of special needs exists during an evacuation when trying to move people to safe areas. For example, people using wheelchairs or other obvious mobility impairments are the most easily recognized; but, there are many who may not appear to have limitations who will also require special assistance.

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- **The Americans With Disabilities Act (ADA) Classification of Disabilities**

Provisions for the following classifications of disabilities shall be included in all emergency action plans.

MOBILITY IMPAIRMENT

Individuals with varying degrees of mobility impairments, ranging from walking slowly to use of wheelchairs and other prosthetic devices.

HEARING IMPAIRMENTS

Individuals with hearing impairments may require visual aids during an evacuation.

VISUALLY IMPAIRED

Individuals with visual impairments may require special assistance. Managers and supervisors are encouraged to provide an advance walk-through of the evacuation routes and to discuss the assistance available to them during an emergency.

TEMPORARY IMPAIRMENTS

Individuals with temporary impairments, such as a person recovering from traumatic injuries, a broken leg, sprained ankle or surgeries may tire easily and may need special assistance or more time to evacuate.

KNOWN MEDICAL CONDITIONS

Individuals with known medical conditions such as respiratory disorders or pregnancy may need special assistance such as physical body support or more time to evacuate.

MENTAL IMPAIRMENTS

Individuals with mental impairments may become confused when challenged with the unusual activity during an emergency, lose their sense of direction, or may require emergency directions that are broken down into simplified steps or basic concepts.

---

## OTHER

Some individuals may panic or freeze during emergencies and may need assistance such as talking to them calmly and slowly while helping them to evacuate.

## VISITORS

The possibility that visitors may be at a Caltrans worksite during an emergency should be included in emergency action plans. Visitors may have small children with them and may require extra time to evacuate.

- **Identifying Persons with Special Needs and/or Disabilities**

Persons with disabilities may have special needs and require accommodations during an emergency. Employees who need assistance are encouraged to tell their supervisor and emergency response personnel about their specific need.

It must be understood that there are individuals who are protective of their right to independence and privacy and who may be reluctant to have their disability or needs identified.

### NOTE:

Supervisors are responsible to maintain a copy of the Form ADM 0131, EMERGENCY NOTIFICATION INFORMATION, for each employee in their files at the worksite for emergency information purposes.

The form provides space for the employee to advise their supervisor that they may need assistance during an emergency evacuation

See Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT, Section 9.06 WHOM TO NOTIFY IN CASE OF AN EMERGENCY, for more details.

The form provides for a "YES" or "NO" answer only. The form shall not state the reason for the assistance. The request for assistance and the disclosure of any specific medical or personal information is voluntary and shall remain confidential.

Employees with permanent or temporary disabilities often have special needs during emergencies. This information must be made available to the supervisor and emergency personnel before an emergency arises.

After a request for special assistance has been made, the supervisor shall arrange for the building manager and members of the local emergency evacuation team to contact the employee to discuss the best way to provide the needed assistance.

---

- **Assistance Techniques During Evacuation**

The following techniques should be followed whenever assistance is provided to persons with disabilities during evacuation:

MOBILITY IMPAIRMENT

Persons in wheelchairs may be able to assist themselves. Some wheelchair users are trained in special techniques to transfer from one chair to another. Ask the employee how best to assist them.

Someone using a crutch or a cane might be able to negotiate stairs independently. It is best not to interfere with a person's movement unless he/she asks for help.

HEARING IMPAIRMENT

Persons with hearing impairments may need special notification:

- Flick the lights on and off when entering the work area or gently tap their shoulder to alert them of an emergency.
- Establish eye contact with the individual, even if an interpreter is present.
- Use facial expressions and hand gestures as visual cues.
- Check to see if you have been understood and repeat if necessary. Written communications may be especially important if you are unable to understand the individual's speech.
- Be patient; the individual may have difficulty comprehending the urgency of your message.
- Provide such individuals with flashlights for signaling their location in the event they are separated from the rescuing team or person assisting them, and to facilitate lip-reading in the dark.

## VISUAL IMPAIRMENT

Persons with vision impairments may need special notification:

- Announce your presence when entering the work area.
- Speak naturally and directly to the individual.
- Offer assistance but let the person explain what help is needed.
- Describe the action to be taken in advance.
- Guide the individual, grasping your arm or shoulder to the exit.
- If leading several persons with visual impairments at the same time, ask them to hold each others' hands.  
(This same technique should be used with normal vision persons if in a dark room or hallway, etc.)
- Make sure that after exiting the building that individuals with impaired vision are not "abandoned" but are led to a place of safety, where colleague(s) shall remain with them until the emergency is over.

### When Assisting Owners of Guide Dogs

- When the dog is wearing its harness, the dog is on duty; if you want the dog not to guide its owner, have the person remove the dog's harness.
- Plan for the dog to be evacuated with the owner.

## LEARNING DISABILITIES

Persons with learning disabilities may have difficulty in recognizing an emergency. Consider the following ideas when assisting persons with disabilities:

- Their visual perception of written instructions or hand signs may be confused.
- Their sense of direction may be limited, requiring someone to show them the exit.
- Their ability to understand is often more developed than their vocabulary.
- Person's with these types of impairments should be treated like an adult who happens to have a cognitive or learning disability.

Persons who may panic, or show signs of fear, during emergencies may also have difficulty in responding to direction and may need special understanding.

For additional information regarding ADA, contact the Disabilities Opportunity Program Administrator, in the Office of Equal Opportunity in Sacramento.



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## 8.08 COMMUNICABLE DISEASE PROTECTION

- **General Information**

This section provides information about ways to reduce the risk of contacting a disease through exposure to body fluids, including blood.

- **Protection Kits**

The Department provides protection kits to employees who administer first aid and/or CPR. The protection kits contain the following types of items:

- ziplock storage bag
  - vinyl or latex gloves
  - face mask/eye shield
  - mouth barrier <sup>1</sup>
  - antiseptic towelette
  - a germicidal wipe which contain benzalkonium chloride and isopropyl alcohol
  - red bio-hazard disposal bag <sup>2</sup>
1. Because of different vendors and the variety of manufactured mouth barriers available, protection kits are not always supplied with same type of mouth barrier device.

NOTE: See Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT ,  
Section 9.13 MOUTH BARRIERS (CPR MASK).

2. Some protection kits may contain a red bio-hazard bag embossed with the statement "DANGER INFECTIOUS WASTE."

The bag is used to store contaminated first aid supplies that may have been used to wipe a victim's body fluids, including blood. Employees should dispose of the bio-hazard bag with the attendant medical provider, the ambulance attendant, the EMT, etc., at the accident scene.

Because of the variety of mouth barriers and protection kits available some package or container sizes may not easily fit into the first aid kit box. Suitable alternative storage may be required. Taping a package or container to a first aid kit box is acceptable.

Adequate supplies of mouth barriers and/or protection kits should be maintained at worksites and in motor vehicles. Supervisors may order additional mouth barriers or protection kits to accommodate their needs.

## 8.09 BLOODBORNE PATHOGENS

- **General Information**

The Bloodborne Pathogen Regulation, Section 5193, General Industry Safety Orders requires precautions in dealing with contaminated materials that have body fluids, including blood and tissues that may spread infections.

This Cal-OSHA standard applies **only** where employees may reasonably have **occupational exposure** to blood or other potentially infectious materials.

Under the Cal-OSHA standard occupational exposure means employees who regularly work as health care providers or work in similar work disciplines.

Caltrans does not have any job descriptions or work activities that qualify under the occupational exposure definition. For example, volunteer first aid responders and/or evacuation monitors do not qualify under the definition.

Because the Cal-OSHA Bloodborne Pathogen regulation (Section 5193) **does not apply to Caltrans employees or its operations**, the information contained in this Bloodborne Pathogens section is provided for general information only.

It is Caltrans policy not to provide pre-exposure injections for bloodborne pathogen exposure. However, whenever an employee is exposed or believes he/she has been exposed to contaminated material that may contain blood or other bodily fluid, post-exposure injections may be provided.

Contact the Workers' Compensation Coordinator, in the District or the Workers' Compensation Case Worker in the Administrative Service Center in Sacramento for information and assistance.

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- **Definition of Bloodborne Pathogens**

A pathogen is any organism or virus that can cause disease. A bloodborne pathogen is an organism or virus carried by blood or other bodily fluid.

The two most significant bloodborne diseases that employees can be exposed to are Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).

HBV, Hepatitis means “inflammation of the liver.” HIV, the human immunodeficiency virus attacks the body’s immune system, causing the disease known as AIDS, or Acquired Immune Deficiency Syndrome.

- **Transmission of Bloodborne Pathogens**

Bloodborne Pathogens are transmitted primarily through contact with blood and some body fluids, but may also be transmitted through sexual contact. (HIV is not transmitted by touching or working around people who may carry the disease.)

HBV, HIV, and other pathogens may be present in body fluids, blood, and skin tissue.

Bloodborne pathogens may enter your body and infect you through a variety of means including:

- An accident/injury with a sharp object contaminated with infectious material:
  - needles;
  - broken glass; and/or
  - anything that can pierce, puncture, or cut your skin
- Open cuts, nicks, rashes, burns, hangnails, and skin abrasions even dermatitis and acne, as well as the mucous membranes of your mouth, eyes, or nose.
- Indirect transmission, such as touching a contaminated object or surface and transferring the infectious material to your mouth, eyes, nose, or open skin

HIV can survive on environmental surfaces dried and at room temperatures for at least one week.

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- **Protecting Yourself Against Infection**

Employees should treat all human blood and other bodily fluids as though they are dangerous and can possibly spread infections.

Medical people are not able to tell for sure which people carry bloodborne pathogens. Both HIV and HBV infect people of all ages, of all socioeconomic classes, from every state and territory, and from rural areas as well as cities.

Many people carry bloodborne infections without visible symptoms. Many people carry bloodborne infections without even knowing they do.

Universal Precautions

Using precautions are recommended while handling all human blood and certain human body fluids as if they were known to be infected with HIV, HBV, or other bloodborne pathogens.

The following safeguards, known as “Universal Precautions” are accepted industry-wide methods, and must be used together to protect employees and reduce the risk from exposure to bloodborne pathogens:

**Engineering controls:** physical or mechanical systems to eliminate hazards at their source. Specially marked bags or containers for contaminated first aid materials, and “sharps” containers are two examples.

A “sharps” is the term used for all sharp syringes, needles or other objects that can puncture skin. A “sharps” container is any container, either specially designed for needles, or it can be a temporary container such as a beverage can.

**Employee work practices:** procedures shall be used on the job to reduce risk of exposure to bloodborne pathogens or infectious materials. Report any sharp objects found at the workplace immediately. Do not touch sharp objects with your hands. Remove and place in a sharps container.

Hand washing will prevent contamination to other surfaces. Use of gloves, face shields, aprons may also be appropriate. Do not eat, drink, smoke, apply cosmetics or lip balms, or handle contact lenses where you may be exposed to blood or bodily fluids.

**Personal protective equipment:** equipment that protects you from contact with potential infectious materials; this may include gloves, masks, aprons, protective eye wear, or protective CPR ventilation masks.

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**Housekeeping:** clean and decontaminate all work areas that may be the source of bloodborne infectious materials. Clean all equipment and working surfaces. Do not pick up broken glass which may be contaminated with gloves or bare hands. Use tongs or a brush and a dust pan.

Use 1/4 cup of household bleach per one gallon of water to decontaminate spilled blood. If you are spraying on a hard surface, just spray and wipe off. If the surface is porous, spray, let stand for few minutes, then wipe off. Use a ratio of 1 part bleach to 10 parts of water.

Follow the Environmental Protection Agency (EPA) list of regulated germicides when purchasing disinfectants. The disinfectant should have a specific reference to HIV or HBV effective. Products should contain information that they are effective for HIV and HBV, not just one.

- **Medical Evaluation and Treatment**

Employees who believe they have been exposed to infection should be evaluated at the time of exposure by a doctor to determine what type of medical treatment is indicated.

(Managers and supervisors should review Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT for details concerning medical treatment and medical clinics.)

If an employee has a specific personal medical concern regarding HBV vaccine, the employee should contact their personal physician for advice.

The Cal-OSHA standard requires employers to provide Hepatitis B vaccine for post-exposure to some work groups. Some work activities conducted by Caltrans may qualify for post-exposure vaccine.

Because the Cal-OSHA standard does not specifically apply to Caltrans operations and/or job descriptions, every incident of alleged HBV exposure will be handled on a case-by-case basis.

Contact the District or Headquarters Office of Safety and Health or Workers' Compensation Program Coordinator for assistance.

## 8.10 TUBERCULOSIS

- **General Information:**

Tuberculosis, or TB, is a disease caused by bacteria. This bacterium can attack any part of your body, but usually attacks the lungs. Tuberculosis was once the leading cause of death in the United States. After effective drug treatment was discovered in the 1940's, TB slowly began to disappear in the United States. However, cases of TB and outbreaks continue to be reported.

It is important to understand that there is a difference between being infected with TB and having TB disease. Someone who is infected with TB has the TB germs or bacteria in their body. The immune system of the body protects them from the germs and they are not sick.

A person with TB disease needs to be under the care of a physician. A person with TB disease that is not being treated **CAN** infect others. Bacteria are spread through the air when a person with TB disease coughs or sneezes. People nearby may breathe in these aerosolized bacteria and become infected. TB is usually spread between family members, close friends, and people who work or live together. It is spread most easily in closed spaces over a long period. In most people, the body is able to fight the bacteria and stop them from growing. The bacteria become inactive, but they remain alive in the body and can become active later. Handling a person's linens, books, furniture, or eating utensils does **NOT** spread the infection. Brief exposure to a few TB germs rarely infects a person. Close contact day after day increases the risk. Because TB spreads in small closed spaces where air does not circulate well, try to keep good ventilation around you to dilute any bacteria that may be in the air.

- **Symptoms:**

A person with TB infection will have **no** symptoms. A person with TB disease may have any, all or none of the following symptoms:

- A cough that will not go away
- Feeling tired all the time
- Weight loss
- Loss of appetite
- Fever
- Coughing up blood
- Night sweats

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These symptoms can also occur with other types of lung disease so it is important to see a doctor to determine if you have TB. It is also important to remember that a person with TB disease may feel perfectly healthy or may only have a cough from time to time. If you think that you have been exposed to TB, see your doctor for a TB skin test. Several other tests must be completed to determine if the person who has TB infection also has TB disease.

The advice for most people is to get a TB skin test if you have symptoms or if you are living in close contact with or have otherwise been in contact with someone who recently came down with TB disease. Groups of people who are considered high risk for developing TB disease include the following:

- People with HIV infection (the AIDS virus)
- People in close contact with those known to be infectious with TB
- People with medical conditions that make the body less able to protect itself from disease (for example: diabetes, the dust disease silicosis, or people undergoing treatment with drugs that can suppress the immune system, such as long-term use of corticosteroids)
- Foreign-born people from countries with high TB rates
- Some racial or ethnic minorities
- People who work in or are residents of long-term care facilities (nursing homes, prisons, some hospitals)
- People who are underfed
- Alcoholics and IV drug users

**IF YOU THINK THAT YOU HAVE BEEN EXPOSED TO TB, SEEK THE ADVICE OF YOUR PHYSICIAN.**

- **Treatment**

The treatment of TB depends on whether a person has TB disease or only TB infection.

Preventive therapy may be given to the person who has become infected with TB, but does not have TB disease. Preventive therapy aims to kill germs that are not doing any damage at this time, but could break out later.

A combination of several drugs is used to treat the person with active TB disease. The infected person will take these medications for six to nine months. It is very important that medications are taken correctly and for the full length of treatment. Re-infection is possible if the regimen is not followed. Subsequent infections are more difficult to treat because of resistance by the TB germs to the medication.

## **8.11 AFRICANIZED HONEY BEES (AHB)**

- **General Information**

The Africanized Honey Bee (AHB) has migrated into California. AHB's display aggressive behavior while protecting their colony location. In some reported attacks, the AHB has seriously stung or killed livestock, and humans. This behavior has earned AHB's the common name "Killer Bees".

- **Activities That Can Cause a Stinging Attack**

AHB's react to activities such as, operation of power equipment, and/or lawn mowers within 100 feet or more of a colony. Movement caused by persons walking within 50 feet of a colony can also cause an attack.

- **Pursuit Distance**

AHB's have been known to follow victims up to 1/4 mile (4 football fields). (European honey bees generally follow for up to 100 feet.)

- **Defensive Reaction Period**

AHB's will remain agitated longer than European honeybees after a colony is disturbed. AHB's remain agitated up to eight (8) hours or more before the defensive reaction subsides. (European honeybees remain agitated perhaps one (1) or more hours before the defensive reaction subsides completely.)

- **Reducing AHB Colonies**

AHB's can enter and establish a colony inside any small exterior openings in building. Supervisors should periodically inspect the work area for potential colonies and reduce them by:

- sealing any opening larger than 1/8 inch, such as pipe entrances on walls and wall siding (stucco, wood) where brick meets wood
- repairing or replacing damaged vent screens on foundations and under eaves
- trimming overgrown shrubs and trees that are located near buildings
- removing litter, emptying containers and trash
- filling in ground holes



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- **Protective Measures, Suggestions, and Recommendations**

If you find a colony of bees, leave them alone and keep others away. Do not throw rocks, try to burn or otherwise disturb the bees. If the colony is near a trail or foot path near areas frequently used by people, notify your local office of the park department, forest service, and fish and game, even if the bees appear to be docile.

Bee colonies vary in behavior over time, especially with changes in age and season. Small colonies are less likely to be defensive than large colonies, so you may pass the same colony for weeks and then one day provoke them unexpectedly. Wear light colored cloths and socks. Bees target objects that resemble their natural predators (bears and skunks) when they defend their nests, so they tend to go after dark leathery or furry objects. Keep in mind that bees see the color red as black, so wearing fluorescent orange is a better choice when hunting.

Avoid wearing scents of any sort when working near bees. Africanized honeybees communicate to one another using scents, and tend to be quite sensitive to odors. Avoid strongly scented shampoo, soaps, and perfumes.

- Employees should inspect work areas for the presence of bees and avoid disturbing colonies before the work begins. Keep escape routes in mind.
- Employees should wear appropriate protective clothing such as long sleeve shirts or coveralls, and hand and eye protection when working where bees might be present.
- If bees attack or swarm, employees should leave the area immediately and seek enclosed shelter. A shelter can be the nearest building or vehicle.
- Employees should not stay in the area. Do not stand still. Do not swat or wave at the bees. Do not try to wash bees off with water.
- The employee should cover his/her mouth and nose area immediately with a cloth or dust mask to breathe. As conditions warrant the employee's personal clothing can be used, e. g., jacket, coat, sweater, shirt-tails, etc., to cover the face.
- When the employee has found appropriate shelter away from the bees, all stingers should be removed to limit continued venom injection. Remove stingers by scraping them free. Pinching or tweezers may cause more venom being injected into the affected body part.
- After removing the stingers or if they remain present, seek medical attention. Medications for pain, itching, and allergic reaction may be required.

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## 8.12 HANTAVIRUS (ADULT RESPIRATORY DISTRESS SYNDROME)

- **General Information**

There are five strains of Hantavirus found in rodents. Four of the virus strains have caused serious health problems in other parts of the world, mainly the Far East and Scandinavia. A fifth hantavirus strain apparently unique to North America has been recently identified. The North American strain attacks the lungs, instead of the kidneys as the other strains do, resulting in the disease termed Adult Respiratory Distress Syndrome (ARDS).

The ARDS virus is believed to be principally carried by a common rodent, the deer mouse, which is found throughout North America and in every California county. Infected rodents shed live virus in saliva, feces and urine. Humans are infected when they encounter and inhale aerosolized microscopic particles that contain dried rodent urine or feces.

These guidelines provide recommendations for the prevention of exposure to hantavirus infections from rodents. They are based on established principles of control from the U. S. Department of Health Services. These guidelines contain general, but limited information. For additional information about hantavirus contact the Office of Safety and Health.

Findings from the California Department of Health Services, Division of Communicable Disease Control, strongly suggest that the hantavirus is more commonly found in rural areas, and less in urban areas. Based upon the findings by the Department of Health Services, the Caltrans Office of Safety and Health recommends the following approach for disease prevention:

- **Inspecting Possible Rodent Colony Habitats**

Supervisors who are responsible for facilities located in rural areas should develop training programs for employees so they can conduct inspections and take appropriate corrective action before entering and working in the following types of facilities:

- |   |                                   |
|---|-----------------------------------|
| • sewage lift stations                    | • wet/dry pumping plants          |
| • pump houses                             | • sand bunkers                    |
| • fuel storage bunkers                    | • bridge cells                    |
| • tanks                                   | • transmitter stations            |
| • GAZ-X avalanche control system shelters | • elevator shafts                 |
|   | • or similar enclosed facilities. |

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- **General Precautions to Prevent Rodent Infestation**

Supervisors should use the following preventive measures in buildings such as maintenance stations, dormitories, surveys or construction field offices, equipment barns and similar storage facilities in rural areas not currently infested.

1. Reduce the availability of food sources and nesting sites inside buildings and facilities.
  - store and cover food in rodent-proof containers
  - store garbage inside, when possible, in rodent-proof containers
  - remove food particles from floors and sinks
  - dispose of trash and clutter
  - use spring-loaded rodent traps
2. Prevent rodent access.
  - use steel wool or cement to seal screens, or otherwise cover openings into buildings larger than 1/4 inch
  - place metal roof flashing as a rodent barrier around the base of dwellings
  - place gravel under the basement of facilities to prevent rodent burrowing
  - locate woodpiles above ground
  - store grains and animal food in rodent-proof containers
  - haul away trash, abandoned vehicles, discarded tires
  - use EPA-registered rodenticides approved for outside use

- **Management of Buildings with Rodent Infestation**

Rodent infestation can be concluded with the presence of rodent feces in closets, cabinets, floors, or evidence that rodents have been gnawing on food.

If rodent infestation is detected inside a facility or other structure used by employees, use the following guidelines for rodent abatement:

Protecting yourself from risk of exposure

Never touch a rodent, its droppings, or its urine with bare hands. Rubber or plastic gloves should be worn when handling dead rodents, contaminated traps, or in cleaning up rodent material. Before removing gloves, wash gloved hands in household disinfectant and followed by soap and water. A sodium hypochlorite solution prepared by mixing 3 tablespoons of household bleach in one gallon of water is effective.

Protective goggles should be worn if contact with the cleaning material or rodent material is anticipated.

The use of respiratory protection should be considered when contaminated material may become aerosolized. The use of a dust mask to limit general dust exposure and to prevent contact of hands with the mouth and nose should be considered.

#### Disposing of rodents and rodent material

Except in the immediate area of a confirmed case of hantavirus infection, rodents and rodent material may be disposed of as ordinary household waste in outdoor garbage containers. An occasional rodent carcass in unaffected or urban areas can be disposed of by picking it up with a plastic bag, inverting the bag, placing it in a second bag, and disposing it as usual household waste.

In affected areas and as an additional precaution in rural areas, rodent carcasses and material should be placed in a plastic bag containing a sufficient amount of a general-purpose household disinfectant to thoroughly wet them. Seal the bag and then dispose of it as permitted by local regulations.

#### Eliminating rodent infestation

Ventilate closed buildings/facilities or areas inside buildings by opening doors and windows for at least 30 minutes. Use an exhaust fan or cross ventilation if possible. Leave the area until the airing-out period is finished. This airing may help remove or dilute any aerosolized virus produced directly by living rodents, which may urinate when startled.

Seal screens, or otherwise cover all openings into the building/facility that have a diameter of 1/4 inch or larger.

Set rodent traps inside the building, using peanut butter or other appropriate bait. Use only spring-loaded traps that kill rodents.

Treat the interior of the structure with an insecticide labeled for flea control; follow specific label precautions. Insecticide sprays or powders can be used in place of aerosols if they are appropriately labeled for flea control. Rodenticides may also be used while the interior is being treated. EPA approved rodenticides are commonly available. Instructions on product use should be followed.

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Remove captured rodents (wearing gloves) from traps and dispose of in plastic bags as described above.

Leave several baited spring-loaded traps inside the building at all times as a further precaution against rodent infestation.

#### Cleaning-up rodent-contaminated areas

Always wear gloves when cleaning-up rodents and rodent material.

Spray dead rodents, rodent nests, droppings, or other items that have been contaminated by rodents with a general-purpose household disinfectant. Soak the material thoroughly, and place it in a plastic bag, and dispose of according to local regulations.

After the rodents have been removed, spray the area with a disinfectant solution. Mopping floors with the disinfectant is also suggested. TO AVOID GENERATING AEROSOLS, DO NOT VACUUM OR SWEEP DRY SURFACES BEFORE SPRAYING OR MOPPING.

Disinfect furniture, cabinet tops, and other durable surfaces. If clothing or fabrics have been contaminated, launder with detergent and water as hot as fabric will allow. Machine-dry on a high temperature setting or hang outdoors to air-dry in the sun.

- **Other Precautions for Rodent Infestation**

Persons involved in the clean-up should wear coveralls and hair coverings, rubber boots, disposable shoe covers, gloves, protective goggles, and an appropriate respiratory protection device, such as a half-mask air-purifying respirator with a high-efficiency particulate air (HEPA) filter or a powered air-purifying respirator with HEPA filter.

The Center for Disease Control has recommended special precautions for cleaning buildings with heavy rodent infestations. Persons conducting these activities should first contact their local health department.

### 8.13 LYME DISEASE

- **General Information**

Although the bacterium has been present in the United States for over 100 years, Lyme disease was only first recognized in 1975 after an outbreak of arthritis in children near Lyme, Connecticut.

Lyme disease is a multi-system bacterial infection caused by the bite of an infective tick. The body does not maintain a natural immunity to this disease, thus infection can reoccur. The known carrier of this bacterial disease in North America is the Western black-legged tick (*Ixodes pacificus*) in the west, and the black-legged tick (*Ixodes scapularis*) in the rest of the country. Ticks may be found anywhere, in the woods, by the seashore, even in your own backyard, although not all of these ticks will be infected with the Lyme disease bacteria. The western black-legged tick has been found in 55 of the 58 counties in California, but is most common in the humid northwestern coastal areas and the western slope of the northern Sierra Nevada.

The nymphal tick is about the size of a poppy seed and the adult is about ¼ inch in length. The tick feeds on animals and humans by embedding its mouth into the skin and sucking blood. Ticks climb to the tips of vegetation, typically along animal trails or paths, and wait for a host to brush against them. In the early stages of growth, ticks can be found in leaf litter in shaded areas.

Ticks can survive under a variety of conditions as long as they have adequate moisture. Here on the West Coast the peak season for ticks is November through April.

- **Early Symptoms**

Early symptoms of Lyme disease generally include a characteristic circular, spreading skin rash usually accompanied by flu-like symptoms such as fever, body aches, stiff neck and fatigue. These symptoms may persist, change, disappear and reappear intermittently for several weeks. Lyme disease is successfully treated with antibiotics and nearly all patients recover completely without complications. However, left untreated, symptoms can progress into heart or nervous system disorders as well as arthritis.

The skin rash known as *erythema migrans* (EM) is a red, blotchy, expanding circle that may grow to several inches in diameter three (3) to thirty (30) days after the bite of an infected tick. The rash may also clear in the middle as it grows producing a ring-like appearance. Do not confuse a local reaction to a tick bite with signs of Lyme

disease infection. A small inflamed bump or discoloration that develops within hours or over the next day from a tick bite is not likely to be due to the infection, but rather a local reaction to the disruption of the skin.

- **Late Symptoms**

Late-stage Lyme disease may not appear until weeks, months or years after the bite of an infective tick. These symptoms may include arthritis and nervous system or heart disorders. Arthritis is most likely to appear as periods of pain and swelling, usually in one or more large joints, especially the knees. Nervous system abnormalities can include numbness, pain, severe headache, impaired memory and concentration. Arthritis and nervous system disorders may occur in the absence of a recognized EM rash. Less frequently, irregularities of the heart rhythm may occur.

- **Prevention**

The chance of being bitten by an infected tick can be decreased with a few preventative measures.

- Whenever possible avoid tick-infested areas.
- Wear light colored clothing so that ticks can be easily seen.
- Tuck pant legs into boots or socks and tuck shirt tails into pants.
- Repellent registered for use against ticks may be helpful in infested areas. Always follow the directions on the label.
- Completely inspect your body at least once a day for attached ticks, especially the armpits and groin areas.
- Never use insecticides, lighted matches or solvents to remove ticks.

- **Removal**

After being outdoors in a suspected tick habitat, it is recommended that you remove all clothing, wash and dry it at a high temperature and inspect your body carefully. If you discover a tick, remove it as soon as possible to reduce the chance of infection. Proper removal of the tick within 24 hours greatly reduces the chance of Lyme disease infection. Grasp the tick as close to the skin as possible, preferably with fine nosed tweezers, pulling slowly and firmly straight out. Wash your hands and the wound with an antiseptic. If you believe you may not have removed all of the tick or you begin to experience symptoms, consult your doctor.

## 8.14 SUN SAFETY

- **General Information**

While the immediate harm, the burning and blistering is painful and to be avoided what people should fear are the long-term consequences of regular sun exposure. All of which can be prevented.

Exposure to the sun is the leading cause of skin cancer. It is estimated that fifty to eighty percent (50-80%) of a person's lifetime exposure to the sun occurs during childhood, by the age of 18. The damage from this exposure accumulates over time. There are more new cases of skin cancer reported in the United States each year than all new cases of lung, breast, prostate, and colon cancer combined. The rate of skin cancers has increased dramatically in the last few decades, in part due to a decrease in the protective ozone layer in the atmosphere and changes in our lifestyles. People have increased leisure time devoted to outdoor activities. Fashion has encouraged a marked decrease in the coverage of clothing worn. Ninety percent (90%) of skin cancer is linked to exposure to the sun. Sun Safety is an important topic for all employees, especially those who work outdoors.

- **Types of skin cancer**

There are more than 200 different forms of cancer that may eventually show up on the skin, however, only three major forms that actually originate in the skin.

*Basal cell carcinomas* make up approximately 80% of all skin cancers. Easily treated, they usually appear as a slow growing fleshy bumps or nodules. Basal cell can be found anywhere on the body but is more likely to be on the face, neck, or hands. These tumors do not spread quickly and may take months to reach the diameter of one-half inch.

*Squamous cell carcinoma* may also appear as a nodule or as a red scaly patch. The second most common skin cancer, squamous cell is generally found on the face, hands, ears, lips and mouth. This cancer will develop into large masses and can spread to other parts of the body.

*Malignant Melanoma* is the least common but most deadly of the major forms of skin cancer. This cancer usually begins as a light brown or black flat spot with irregular borders that may later become multi-colored with red, blue violet or white. It often grows from a mole. Melanoma is the most aggressive of the three types.



- **Who gets this disease**

The most significant common factor among skin cancer patients is fair skin. Lighter skin usually does not have enough melanin to protect it. Melanin is the pigment that gives skin its color. When skin is exposed to ultraviolet (UV) light, more melanin than normal is released in order to protect the skin from damage. This darkening appears as a “tan” although it is really signifying damage to the skin is taking place. This exposure to ultraviolet light also contributes greatly to:

- Premature aging
- Cataracts
- A weakened immune system

*Common Risk Factors*

1. Fair skin
2. Blue, green or hazel eyes
3. Light-colored hair
4. Freckles
5. A tendency to burn rather than tan
6. History of severe sunburns
7. Have many moles (over 50-100)
8. A personal or family history of skin cancer
9. Blistering sunburns as a child or adolescent

Skin cancer does develop in a smaller number of naturally darker skinned people, but usually appears on the lighter parts of their bodies. The tendency to get skin cancer runs in families, partly because skin types tend to be inherited. It is also believed that certain genes may contribute to skin cancer.

- **Protecting yourself against the solar hazard**

Although nothing can be done about one’s hereditary factors, everyone can do something to help protect themselves from the hazards of overexposure to the sun. UV radiation is more intense during certain times and conditions and should be avoided when possible. Times to avoid exposure are:

- From 10 a.m. to 4 p.m.
- Where there is lack of thick cloud cover
- From mid-spring through mid-fall
- At higher altitudes

Whenever possible wear wide-brimmed hats, long-sleeved shirts and other clothing with a tight weave to keep UV radiation from reaching your skin. Wear sunglasses that filter 100% of the UV rays. Broad-spectrum sunscreens with a Sun Protection Factor (SPF) of 15 or higher may be beneficial. Sunscreens are a personal item and should be purchased and tested by the user to find the type and brand best suited to their needs. Not all sunscreens will protect from both UVA and UVB radiation and one should not get a false sense of security using a sunscreen. Protection differs between brands, users, altitude and proximity to the equator. They must be applied 20-30 minutes before going out into the sun and reapplied every 2 hours or less depending upon conditions. Physically blocking the rays from the sun with clothing and shade is the best defense.

- **Early Detection**

Everyone should perform a monthly check of their skin paying close attention to any moles. Look for changes in size, shape, or color of moles and any bumps, lumps or red patches. Check your entire body including between your toes and the soles of your feet.

- **The A-B-C-D rule in detecting malignant melanoma**

**A** – *Asymmetry*: one half does not look like the other half

**B**. – *Border*: the edges are scalloped or ragged looking from one area to another; shades of black, brown, and violet, and sometimes red

**C**. – *Color*: varies, blue and white

**D**. – *Diameter*: as large as a pencil eraser (6 mm) or larger

### **The Good News:**

Fortunately, the majorities of skin cancers are local growths and do not spread from the site of origin. Malignant melanoma is one that can and does spread. If you suspect that you have any form of skin cancer, you should consult your physician immediately. When diagnosed and treated early virtually all skin cancers can be cured with the proper medical strategy.

## 8.15 HEAT STRESS

- **General Information**

Our body has a natural mechanism that regulates a core temperature of 98.6° F (37.0° C) by releasing excess heat into the air through the blood vessels near the skin's surface and through the evaporation of sweat.

Under certain conditions, your body may have trouble regulating its temperature. Consequently, your body overheats and suffers from some degree of heat stress. Moderate or severe heat stress can occur suddenly and be dangerous to your health.

- **Types of Heat Stress**

### **MILD: Minor Heat Problems.**

This is the earliest and least serious form of heat stress. Mild heat stress is always reversible and usually not dangerous unless the symptoms persist. Although you can continue work soon after treatment, always inform your supervisor if you experience mild symptoms of heat stress at work.

#### *Signs and Symptoms -*

- excessive sweating;
- painful spasms in muscles during or several hours after activity (**heat cramps**);
- tiny red bumps on the skin and a prickling sensation (**called prickly heat**); and/or
- irritability, mild dizziness, or weakness.

#### *What Your Body is Doing -*

Sweating causes your body to lose water and minerals. This imbalance causes muscles to cramp. Your sweat glands become blocked and inflamed, causing a rash. Too little blood flow to the brain causes dizziness and other symptoms.

#### *Treatment -*

- rest in a cool or shady area;
- drink water or other fluids;
- use warm moist compresses over cramping muscles, followed by a gentle massage;
- use a mild drying lotion to relieve the rash; and,
- keep skin dry and clean.

**MODERATE: Heat Exhaustion.**

A more serious form of heat stress, although the symptoms are usually reversible if treated quickly. You should take a break from work and get medical attention. Inform your supervisor immediately if you experience symptoms of moderate heat stress.

*Signs and Symptoms -*

- excessive sweating;
- cold, moist, pale, or flushed skin;
- thirst;
- extreme weakness or fatigue;
- headache, nausea, or loss of appetite;
- dizziness or giddiness; and,
- a rapid weak pulse.

*What Your Body is Doing -*

Losing too much water and minerals reduces the blood supply to your brain, muscles, and skin. Your heart works harder to maintain the blood supply.

*Treatment -*

- rest in a cool shady area;
- drink water or other fluids;
- take additional salt, if instructed by physician; and,
- use cool compresses on forehead, around the neck, and under armpits.

**SEVERE: Heat Stroke.**

This is a serious, **life-threatening medical emergency**. It can happen in a few hours or less while working in a hot environment. The symptoms are reversible, but if not treated promptly, heat stroke can lead to permanent brain damage or death.

*Signs and Symptoms -*

- lack of sweating;
- hot, dry, flushed skin;
- deep rapid breathing;
- a rapid, weak, and possibly irregular pulse;
- headache, nausea;
- dizziness, confusion, or delirium; and
- loss of consciousness and convulsions.

*What Your Body is Doing -*

Your body becomes so overburdened that blood flow and sweat cannot cool your body sufficiently. Your body becomes overheated and your sweat glands and other organs cannot function normally. This can effect vital organs, including your heart and brain, and may cause permanent damage.

*Treatment -*

- rest in a cool or shady area;
- remove outer clothing;
- lower body temperature with cool compresses or pour water on clothing;
- increase air movement around body; and,
- drink water or other fluids, and DO NOT “ice down”.

- **Preventing Heat Stress - A Checklist**

Prevent heat stress by taking an active role in preventing heat-related problems. Know the factors that increase your risk and take steps to reduce them. Drink water and acclimatize yourself to the heat environment you may work in.

Supervisors and employees must be able to recognize health risks associated with working in areas and/or performing work activities that may contribute to heat stress.

The following items are suggested ideas and/or steps that supervisors and employees can take to help prevent heat stress:

- Know which factors contribute to heat stress. Discuss ways to reduce health risk. Discuss the increased risk when working in areas of high exposure to heat such as hot and humid days, or exposure to radiant heat from mechanical sources.
- Drink plenty of water. Do not wait until you are thirsty to drink water or other fluids. Thirst is not a good indicator of how much water your body needs. Increase the amount of water you drink to replenish the water you lose from sweating. Drink more water or other fluids than you need to satisfy your thirst. It is best to replenish regularly by drinking small amounts frequently throughout the work shift.
- Take frequent rest breaks. Depending on conditions; i. e., air temperature, sun exposure, or physical exertion, more frequent breaks may be needed.

- 
- Wear personnel protection equipment to guard against heat exposure. When possible wear comfortable loose, lightweight clothing, which allows body heat to be released. Cover your head.
  - Acclimatize to hot work. This usually requires several days of short periods of working in the heat gradually increasing work time and intensity. Consider alternative work schedules, work earlier or later, when heat is less severe.
  - Employees in good physical condition tend to acclimatize better because their cardiovascular systems respond better.
  - Eat light meals. Hot, heavy meals add heat to your body and divert blood to your digestive system. It is better to eat light during the workday when exposed to heat.
  - Avoid alcohol, caffeine, and medications. They act as diuretics and dehydrate the body. Medication used to control high blood pressure or allergies, including diabetes can increase your risk of heat stress.
  - In many job assignments, heat is a fact of life. Supervisors and employees should work together to reduce the risk of heat stress by monitoring and controlling the work environment. Supervisors should allow employees to adjust gradually to working in the heat.

## 8.16 COLD STRESS

- **General Information**

The body can take very little exposure to cold temperatures without the help of appropriate protective clothing. Unless properly protected, the body temperature drops and the person suffers some degree of cold stress.

Unless properly protected, cold temperatures can cause acute reactions to the body; hypothermia and frostbite.

Hypothermia occurs when the body loses heat faster than it can produce heat.

At first, the body temperature drops in the hands and feet. If the body continues to lose heat, involuntary shivers usually begin. This is the first real warning sign of hypothermia. If heat loss continues, the person will become confused and disoriented followed by coma and death, which can follow very quickly.

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Frostbite occurs when the hands or feet actually freeze with crystals of ice forming in the tissues and damaging them.

If the hand and/or foot is not too severely damaged, it may heal; but chronic symptoms such as pain, numbness or abnormal skin color may continue for years after the frostbite occurred. In extreme frostbite cases, gangrene may occur and amputation of the affected body part may be necessary.

Working in cold environments can overload your body, especially in rain, snow or other high-humidity conditions. These environmental conditions make it harder for your body to generate and maintain proper levels of internal heat to your hands, feet, ears, nose, and head.

Like heat stress, our bodies also vary in their ability to handle cold. You can avoid the adverse health and safety effects of cold stress by knowing your body and its limitations. Working in cold environments can overwork your body's mechanism that controls body temperature

Learn to understand cold stress by learning to recognize your body's warning signs; e.g., uncontrollable shivering, drowsiness, painful swelling in the hands and feet.

If you experience any of the above signs take immediate steps to stop further exposure to cold, and seek medical attention as soon as possible.

- **Preventing Cold Stress - A Checklist**

Supervisors and employees must be able to recognize health risks associated with working in areas and/or performing work activities that may contribute to cold stress. The following items can help prevent cold stress:

- > Knowing which factors contribute to cold stress and discuss ways to reduce cold temperature risks and take appropriate precautions.
- > Discuss the likelihood of increased risk when working in areas of high exposure to cold, such as fog, rain and snow.
- > Wear personnel protection clothing to protect your head, feet, and hands.
- > Avoid alcohol, caffeine, and medications.
- > Acclimatize to cold work environments. This usually requires several days of short periods of working in the cold, gradually increase in time and intensity. Consider alternative work schedules, work when cold is less severe.

- > Insulate the body by wearing warm personal protective clothes.
- > Pay attention to your hands, feet, and head. Since the body's internal heat regulator maintains the temperature of internal vital organs, employees must protect their extremities.
- > Minimize exposure to air movement by using vehicles or other physical barriers as windshields for protection from wind and drafts.
- > Stay dry and warm. If exposure to water is unavoidable, do not permit the exposure to be prolonged. Have dry clothes available.
- > Eat a well-balanced diet and drink plenty of water.
- > Cold hazards can be controlled either by designing work so that exposures are eliminated or minimized or by the use of protective clothing.
- > Materials can be prefabricated or maintenance jobs preformed in warm areas and then the product moved to the cold area for final assembly.
- > When work is being performed in the cold, rest breaks should be taken in warm areas and hot beverages should be available.
- > Cover metal handles of tools and control bars with thermal insulation materials.
- > Provide spot heating (portable heaters).
- > Feet and hands, ears and nose are especially sensitive areas and should be well protected.



**WIND-CHILL INDEX**

<b>Wind speed in mph</b>	<b>ACTUAL THERMOMETER READING (F)</b>										
	50	40	30	20	10	0	-10	-20	-30	-40	
	<b>EQUIVALENT TEMPERATURE (F)</b>										
calm	50	40	30	20	10	0	-10	-20	-30	-40	
5	48	37	27	16	6	-5	-15	-26	-36	-47	
10	40	28	16	4	-9	-21	-33	-46	-58	-70	
15	36	22	9	-5	-18	-36	-45	-58	-72	-85	
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113	
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	
<b>Over 40 mph (little added effect)</b>	<b>LITTLE DANGER (for properly clothed person)</b>			<b>INCREASING DANGER (Danger from freezing of exposed flesh)</b>				<b>GREAT DANGER</b>			

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# CHAPTER 9

## **FIRST AID AND EMERGENCY MEDICAL TREATMENT**

### **PROVIDING FIRST AID AND/OR EMERGENCY MEDICAL TREATMENT FOR OCCUPATIONAL INJURIES AND ILLNESSES**

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# CHAPTER 9

## FIRST AID AND EMERGENCY MEDICAL TREATMENT

### **PROVIDING FIRST AID AND/OR EMERGENCY MEDICAL TREATMENT FOR OCCUPATIONAL INJURIES AND ILLNESSES**

#### **9.00 INTRODUCTION**

This chapter covers information about first aid and/or emergency medical treatment, transportation, emergency medical facilities, notice to employee crime victim, predesignated personal physician, first aid supplies, and first aid and CPR training.

#### **9.01 PURPOSE**

The purpose of this chapter is to ensure managers, supervisors, and employees follow specific instructions whenever first aid and/or related medical services are needed to assist an injured or ill employee.

See Chapter 10 - REPORTING PERSONAL INJURIES AND ILLNESSES for information about specific forms used to report and document occupational injuries and illnesses.

#### **9.02 POLICY STATEMENT**

Supervisors and facility/building managers are responsible to have first aid supplies readily available at each worksite to provide immediate aid to injured or ill employees, and/or to provide transportation for an injured or ill employee to a medical facility for treatment.

#### **9.03 DEFINITION OF FIRST AID AND LIMITATIONS**

Caltrans employees, including co-workers, and/or designated first aid response team members, are allowed to administer first aid to an injured or ill employee as defined in Section 2582.1 of the State Administrative Manual (SAM), which states:

***“The assistance provided the sick or injured before medical help is available but only with the express purpose of controlling the loss of blood, sustaining breathing, and reducing the effects of shock. Suitably trained personnel are highly recommended. Medical diagnosis, treatment, and provision of medicines or drugs (aspirin included) are not appropriate.”***

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Providing first aid or medical treatment beyond “first aid” as defined in the SAM is not acceptable for Caltrans employees.

The purchase of advanced first aid supplies, trauma kits, oxygen systems, or similar medical devices is clearly beyond first aid, and contrary to Departmental policy.

Employees who engage in off-duty first aid and CPR activities, such as volunteers in community organizations, should be encouraged to use their skills in administering first aid/CPR within the SAM definition, but should not provide medical diagnosis or treatment beyond that.

## **9.04 MEDICAL RESPONSE AND TRANSPORTATION**

Whenever an occupational injury or illness occurs the first obligation is to provide the injured or ill employee with first aid and/or other appropriate medical treatment.

The severity of an injury or illness determines whether or not the employee is cared for at the worksite or transported to a medical facility for medical treatment.

The employee may be taken to a medical facility by a supervisor or co-worker, and if necessary by an ambulance to a medical facility for professional medical treatment.

Medical services and first aid requirements are based on the following Cal-OSHA regulations:

Section 3400(b) of the General Industry Safety Orders, and Section 1512(b) of the Construction Safety Orders requires every employer to have personnel adequately trained to render first aid.

Section 3400(f) of the General Industry Safety Orders requires every employer who has employees situated in isolated locations, e. g., maintenance stations, construction field offices, or other field locations, shall have personnel adequately trained to render first aid.

At Caltrans first aid is provided by employees who volunteer their skills to render aid to an injured or ill employee, and make up Caltrans First Aid Teams at District Offices, Service Centers, or they are employees assigned to “field work” and are trained in first aid and CPR based on the Cal-OSHA regulations cited above.

In addition to the information presented here, procedures for calling for first aid, arranging for medical treatment, and/or emergency transportation to a medical facility are described in Emergency Action Plans and may differ between offices locations and remote field locations.

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NOTE:

See Section 9.07 for conditions and restrictions regarding the use of an employee's predesignated personal physician for occupational injury or illness.

See Section 9.11 and 9.12 for information regarding training requirements for first aid and CPR.

See Chapter 8 - GENERAL HEALTH, MEDICAL, AND SAFETY, Section 8.06 for information covering Emergency Action Plans.

**Medical response, medical treatment, and transportation is provided as follows:**

- **First Aid**

First aid is limited to providing immediate medical aid, by a supervisor or co-worker, or by a First Aid Team.

First aid care is the assistance provided to an injured or ill employee by a supervisor, co-worker, or First Aid Team member, but only with the express purpose of controlling the loss of blood, sustaining breathing, and reducing the effects of shock.

Therefore, whenever an employee is injured or becomes ill the first person on-the-scene must assess the employee's physical condition and appearance, and the circumstances surrounding the accident/incident, and call for and/or offer first aid.

If the first person on-the-scene is unsure of what to do or unsure about what appropriate care is needed, he/she should ask for assistance, call or arrange for someone to call the Building Manager as described in your local Emergency Action Plan.

The Building Manager will alert the First Aid Team of the location of the accident. The First Aid Team will respond and provide medical care.

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- **Professional medical treatment, NON-EMERGENCY**

Professional medical treatment, non-emergency, is when the severity of the injury or illness indicates that medical treatment beyond first aid is indicated, and the injury or illness is not life-threatening.

The first person on-the-scene must assess the employee's physical condition and appearance, and review the circumstances surrounding the accident/incident, and offer first aid, or call for first aid or other appropriate medical treatment.

If the first person on-the-scene is unsure of what to do or unsure about what appropriate care is needed, he/she should ask for assistance, call or arrange for someone to call the Building Manager as described in your local Emergency Action Plan.

The Building Manager will alert the First Aid Team of the location of the accident. The First Aid Team will respond and provide medical care.

If it is determined that the injured or ill employee must be taken to a medical facility for medical treatment, the following actions shall be taken:

- The supervisor, in cooperation with the First Aid Team recommendation, shall arrange for transportation.

[The method of transportation (state or private vehicle) to the medical facility shall be made by the supervisor in cooperation with the first aid team, or other appropriate person(s)]

- The supervisor or designee shall always accompany the injured or ill employee to the medical facility.
- The supervisor or designee shall advise the medical facility staff (doctor or nurse) if the injury or illness is work-related.
- The supervisor or designee shall take a Form PM-S-0037, MEDICAL TREATMENT AUTHORIZATION to the medical clinic or hospital.

The MEDICAL TREATMENT AUTHORIZATION, Form PM-S-0037, represents a financial authorization from Caltrans, and the State Compensation Insurance Fund (SCIF), to provide medical treatment to the employee, WITH AN OCCUPATIONAL INJURY OR ILLNESS, and ensures that payment for services by the medical provider will be paid by Caltrans through SCIF. A sample of the MEDICAL TREATMENT AUTHORIZATION form is included in Chapter 10 - REPORTING PERSONAL INJURIES AND ILLNESSES.

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- **Professional Medical treatment, EMERGENCY with emergency transportation**

Professional medical treatment, EMERGENCY, means the severity of the injury or illness is serious and/or may be life-threatening.

The first person on-the-scene must assess the employee's physical condition and appearance, and review the circumstances surrounding the accident/incident, administer first aid, and/or call for appropriate medical treatment.

If the first person on-the-scene is unsure of what to do or unsure about what appropriate care is needed, ask for assistance, call or arrange for someone to call the Building Manager as described in your local Emergency Action Plan.

The Building Manager will alert the First Aid Team of the location of the incident. The First Aid Team will respond, provide medical care, and assist in the decision to call for professional medical treatment and transportation.

If it is determined that the injured or ill employee must be taken to a medical facility for emergency professional medical treatment, the supervisor and the First Aid Team members shall use discretion, and if deemed appropriate, call an ambulance.

As conditions indicate, the supervisor, or First Aid Team shall cooperate with the decisions made by emergency medical personnel, law enforcement personnel, or other medical authority regarding treatment and/or transportation.

When the employee is taken to a medical facility for professional medical care, the following actions shall be taken:

- The supervisor or designee shall always go to the medical facility.
- The supervisor or designee shall advise the medical facility staff (doctor or nurse) if the injury or illness is work-related.
- The supervisor or designee shall take a Form PM-S-0037, MEDICAL TREATMENT AUTHORIZATION to the medical clinic or hospital, as discussed above.



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- **Calling 9-1-1**

Most State telephone services require dialing **9 + 9-1-1** to connect with an emergency service provider.

When calling for emergency assistance, **DO NOT HANG UP**, let the emergency provider end the conversation.

When requesting emergency aid or reporting an emergency situation by dialing **9 + 9-1-1**, your telephone number and address may be automatically displayed on a viewing screen of the emergency provider. This information enables the emergency agency to quickly locate you if the call is interrupted.

#### **9.05 MEDICAL FACILITIES (State approved clinics)**

- **Posting Form STD. 621 “NOTICE TO STATE EMPLOYEES”**

To ensure that an injured or ill employee receives all necessary and reasonable medical treatment Caltrans management has secured the services of medical clinics, physicians, or hospitals in the vicinity of all Caltrans offices throughout the State.

The location of approved medical facilities are usually listed on Form STD. 621, NOTICE TO STATE EMPLOYEES, as required by the State Administrative Manual (SAM), Section 2582 which states:

“Each agency must post a complete NOTICE TO STATE EMPLOYEES, STD. Form 621, at state offices and places of state work.”

Building managers are responsible to post a completed copy of the form in conspicuous places at each Caltrans worksite. At a minimum, they shall be posted on designated safety and health bulletin boards, or other appropriate locations.

Copies of the Form STD 621 can be obtained from District or Headquarters Safety and Health Offices, and/or can be ordered through District or Service Center Warehouses.

A copy of Form STD 621 is shown at the end of this chapter. A sample map showing the location of medical clinics is also shown at the end of this chapter.

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**9.06 WHOM TO NOTIFY IN CASE OF AN EMERGENCY**

- **How to use Form ADM - 0131  
EMERGENCY NOTIFICATION INFORMATION**

The “Emergency Notification Information” form is a multi-purpose document designed to display specific information for emergency purposes. The form has been divided into five (5) sections as follows:

**NAME OF EMPLOYEE:** provides space for the employee's name, classification, home address, telephone number, and other employment information.

**PERSON TO NOTIFY IN CASE OF AN EMERGENCY:** provides space for the name, address, relationship, and telephone number of a person(s) to be notified in case of an emergency.

Employees are responsible to inform their supervisor of any changes in choice of the person to be notified so the information in the supervisor's file is accurate and current.

**NAME OF PREDESIGNATED PERSONAL PHYSICIAN - FOR OCCUPATIONAL INJURY OR ILLNESS:** provides space for name and address of a predesignation of a personal physician.

See Section 9.07 EMPLOYEE'S CHOICE OF PERSONAL PHYSICIAN below for more details.

**EMPLOYEE NEEDS SPECIAL ASSISTANCE DURING AN EMERGENCY:** provides space for a “YES” or “NO” answer only if the employees may need special assistance during an emergency evacuation.

The form shall not state the reason for the assistance. The request for assistance and the disclosure of any specific medical or personal information is purely voluntary and shall remain confidential.

Employees with permanent or temporary disabilities often have special needs during emergencies. This information must be made available to supervisory and emergency personnel before an emergency arises.

See Chapter 8 - GENERAL HEALTH, MEDICAL AND SAFETY, Section 8.07 EMERGENCY ACTION PLAN AND EVACUATION REQUIREMENTS SPECIFICALLY COVERING THE AMERICANS WITH DISABILITIES ACT (ADA), Sub-section - Identifying Persons with Special Needs and/or Disabilities. for details about special assistance during emergencies.

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**ADDITIONAL INFORMATION:** provides space for any additional information which an employee may wish to volunteer, or comments by the supervisor.

\* \* \* \*

Employee is personally responsible for providing information to his/her supervisor and updating that information when names or conditions change.

Supervisors shall maintain a copy of the EMERGENCY NOTIFICATION INFORMATION form for each employee at the worksite.

An additional copy shall be filed in the employee's official personnel folder in the Office of Personnel Operations, Personnel Transactions Branch, Northern and Southern Service Centers, and/or other appropriate location to satisfy local needs.

A sample of an EMERGENCY NOTIFICATION INFORMATION, Form ADM-0131 is shown at the end of this chapter.

## **9.07 NOTICE TO EMPLOYEE CRIME VICTIMS**

- **Eligibility for workers' compensation for employee(s) who is(are) victim(s) of a crime that occurred at place of employment**

### **§ 3553. Labor Code "Notice to Crime Victims," states:**

Every employer subject to the compensation provisions of this code shall give any employee who is a victim of a crime that occurred at the employee's place of employment written notice that the employee is eligible for workers' compensation for injuries, including psychiatric injuries, that may have resulted from the place of employment crime. The employer shall provide this notice, either personally or by first-class mail, within one working day of the place of employment crime, or within one working day of the date the employer reasonably should have known of the crime.  
Leg. H 1997 ch 527.

Supervisors, with the assistance of the District or Headquarters Safety and Health Offices, and the Workers' Compensation Case Managers shall ensure that affected employee(s) is(are) notified about this policy.

As a general rule, notification about eligibility for workers' compensation for injuries, including psychiatric injuries, should be given to: 1) injured employee(s), 2) an employee(s) directly involved, but uninjured, and 3) employee(s) at the worksite.

**NOTE:**

See Chapter 6 - WORKPLACE VIOLENCE for details about Departmental policies, procedures, and strategies for maintaining a zero tolerance for violence in the workplace.

See Chapter 19 - SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS, OR FATALITY for details about reporting procedures.

**9.08 EMPLOYEE'S CHOICE OF PERSONAL PHYSICIAN**

The California Labor Code, Section 3552. Providing "personnel physician" states:

"Upon the request of an employee, an employer shall provide the employee with an appropriate form on which the employee may indicate the name of his or her "personal physician," as defined in Section 4600."

Section 4600. Medical treatment provided by employer; expenses included, states in part:

"Medical, surgical, chiropractic, and hospital treatment, including nursing, medicines, medical and surgical supplies, . . . . that is reasonably required to cure or relieve the effects of the injury shall be provided by the employer."

Further, Section 4600 defines personal physician as:

"For the purpose of this section, "personal physician" means the employee's regular physician and surgeon, licensed pursuant to . . . Business and Professional Code, who has previously directed the medical treatment of the employee, and who retains the employee's medical records, including his or her medical history."

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The California Code of Regulations, Title 8, Industrial Relations, Chapter 4.5, Division of Workers' Compensation, Section 9780.2. Employer Duty to Provide First Aid and Emergency Treatment, states in part:

“Where an employee has notified his or her employer in writing prior to the date of injury that he or she wishes to be treated by a personal physician pursuant to Labor Code 4600, the employer shall continue to have the duty to provide first aid treatment, and appropriate emergency treatment reasonably required by the nature of the injury or illness. Thereafter, if further medical treatment is reasonably necessary, the employee may be treated by his or her personal physician at the expense of the employer.”

Therefore, whenever an employee is injured or becomes ill while on the job, and it has been determined that first aid treatment, and appropriate emergency treatment is required, the supervisor's first duty and obligation is to provide for prompt transportation to the nearest approved medical facility.

**Conditions and restrictions regarding the use of an employee's personal physician for occupational injury or illness are as follows:**

An employee's choice of predesignated personal physician may be used for **non-emergency** medical care for occupational injury and illness, and if **geographic conditions** allow for transportation to the predesignated personal physician's office:

**Non-emergency** means that the employee's injury or illness is not life-threatening; and,

**Geographic conditions** means that the physicians office is located within a reasonable distance from the place of injury or illness, and a Caltrans approved medical facility is not closer than the physician's office.

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**The employee's predesignated personal physician may be used under the following conditions:**

1. If medical and/or geographical circumstances permit, and; the injury or illness is considered a non-emergency, and; the employee has a request to use his/her personal physician on file, the employee's personal physician may be utilized.
2. For non-emergency medical care, if; before taking the employee to his/her personal physician, the employee can confirm that his/her physician will accept walk-in treatment.
3. If the employee's personal physician will not accept the employee for walk-in treatment at the time it is needed, the supervisor shall take the employee to the nearest approved medical facility for appropriate medical care.

Use Form ADM-0131 EMERGENCY NOTIFICATION INFORMATION for predesignating a personal physician for occupational injury or illness.

## **9.09 REQUIREMENTS FOR FIRST AID MEDICAL SUPPLIES**

- **Minimum Requirements**

Section 2582.1 of the State Administrative Manual (SAM) and Section 3400 of the General Industry Safety Orders (GISO) require every State department to provide and have readily available first aid kits and appropriate medical supplies for injured or ill employees.

These regulations also require that first aid kits and supplies shall be kept in sanitary and usable condition, inspected frequently, and supplies replenished as they are used.

- **Supervisor's Responsibilities**

Supervisors are responsible to ensure that first aid kits and appropriate medical supplies are readily available, and in sufficient quantity, for injured or ill employees at all worksites within their area of responsibility.

For example, separate first aid kits may have to be ordered to accommodate work groups that may be physically separated by wall partitions, hallways, different floors within multi-floor buildings, or other physical barriers.

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Supervisors shall inform their employees of the location of first aid kits in the work area and adjacent work areas. Supervisors may post signs showing the location of first aid kits.

Supervisors may order several first aid kits of different sizes to accommodate the needs of their employees.

Supervisors shall conduct, or assign a person to conduct, routine inspections of first aid supplies at each worksite, office, or facility to replenish supplies.

- **Building Manager's and Facilities Operations Responsibilities**

Building Manager's and/or Facilities Operations personnel are responsible to ensure that all Caltrans facilities, including rented or leased facilities, are supplied with an adequate number of first aid kits and appropriate medical supplies in areas not specifically covered by individual supervisors, as described above.

If building owners/rental agents, do not provide adequate first aid kits and medical supplies, through lease or rental agreements, necessary to comply with the SAM or Cal/OSHA requirements, Caltrans Building Managers and/or Facilities Operations personnel shall take the necessary steps to ensure first aid materials are readily available.

Building Managers should post signs showing the location of first aid kits and other supplies as may be deemed appropriate.

Building Managers shall conduct, or assign a person to conduct, routine inspections of first aid supplies at each worksite, office, or facility under their jurisdiction to replenish used supplies.

- **Special Request/Location for First Aid Kit/Supplies**

Building Manager's and/or Facilities Operations personnel should give special consideration for additional first aid supplies in leased buildings where local codes or lease agreements may not require first aid supplies in common work areas; i.e., employee lounge, restrooms, and kitchen areas where coffee machines and food preparation is handled. This is particularly important in new or remodeled buildings equipped with modular furniture where one (1) centrally located kitchen area services the needs of an entire floor of a building.

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- **Medical Approvals for Exceptions to First Aid Supplies**

Section 3400(c) of the General Industry Safety Orders allows State departments to order first aid and medical supplies, that are not normally used, provided they are approved by a consulting physician.

Therefore, if managers and/or supervisors determine that a special first aid item, not included on the approved list, would best fit their particular work activity, they may request an exception to the approved list.

The Chief, Office of Safety and Health (Headquarters), in cooperation with the State Medical Officer, must approve all exceptions for first aid supplies. Managers and supervisors should not independently procure or order first aid supplies without first obtaining the necessary approvals.

In order to be granted an exception, managers and/or supervisors should contact the District or Headquarters Safety and Health Office for assistance as follows:

- The District Safety and Health staff is available to discuss alternative first aid items with District personnel. The Headquarters Safety staff is available for questions in the Sacramento area.
- The District Safety and Health Officer should contact the Headquarters Safety Office, which will review, and forward all requests for exceptions to the State Medical Officer. The Headquarters Safety Office will notify the requesting district of the medical officer's decision.
- Supervisors are encouraged to solicit information from the safety staff about products that may make his/her work safer, and reduce the potential for injury or illness.



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**9.10 LOCATION OF FIRST AID KITS**

The following is the suggested minimum distribution and size of first aid kits to ensure that all employees have easy access to first aid supplies. There are no restrictions to the number of first aid kits available at each facility. An adequate number of first aid kits shall be located at every Caltrans facility to accommodate the needs of employees. Supervisors and building managers are responsible to determine the number of first aid kits required to satisfy their needs.

First aid kits shall be available at each worksite and in vehicles as indicated below:

<b><u>KIT SIZE</u></b>	<b><u>RECOMMENDED LOCATION OF FIRST AID KITS</u></b>
<b>5 Unit Kit -</b>	For personal use, may be carried by employees.
<b>10 Unit Kit -</b>	At each construction crew field worksite. At each maintenance crew field worksite. In each maintenance crew vehicle. At each landscape crew field worksite. In each resident mechanic vehicle. Held by each certified first aid responder.
<b>16 Unit Kit -</b>	In each survey crew vehicle. At each survey field office.
<b>24 Unit Kit -</b>	At each construction field office. At each Equipment Shop. At each maintenance station. Any other office work setting deemed appropriate.
<b>36 Unit Kit -</b>	At various locations within each District Office building or satellite office building, the Caltrans Headquarters office building, Service Centers, and satellite offices. At various locations within each Caltrans rented or leased building.

New or replacement supplies can be ordered through the Caltrans Purchasing and Warehousing Catalog.

## 9.11 CONTENTS OF FIRST AID KITS

ITEM	5 - UNIT	10 - UNIT	16 - UNIT	24 - UNIT	36 - UNIT
1" BANDAGE	1	1	2	3	4
4" BANDAGE "ACE"	-	-	1	1	2
GAUZE BANDAGE 2" X 6 YDS	-	1	-	2	4
GAUZE COMPRESS 3" X 3"	1	1	2	2	4
SELF-ADHERING GAUZE 1" X 7 1/2 YDS	1	1	1	2	3
ADHESIVE TAPE 2 ROLLS 1/2 " X 2 1/2 YDS	-	1	2	2	3
EYE DRESSING PADS	-	1	1	1	2
TRIANGULAR BANDAGE 40 "	1	1	1	1	2
WIRE SPLINT	-	-	1	1	2
ANTISEPTIC SWAB	1	1	3	3	4
SCISSORS AND FORCEPS-	-	1	1	1	1
VINYL GLOVES	2	4	4	4	4

### ADDITIONAL ITEMS AVAILABLE

TOILET SOAP 1 OZ (BAR SOAP)	2	4	4	4	4
TOILET SOAP 2 OZ (BAR SOAP) (ALTERNATE SIZE)	2	4	4	4	4
POISON IVY/OAK WASH (AVAILABLE UPON REQUEST)					
ADHESIVE TAPE (WATERPROOF)	1	1	2	2	3
INSTANT COLD PACK	-	-	1	-	-
TOWLETTE PREPS	2	4	4	4	4
FIRST AID MANUAL	1	1	1	1	1

FIRST AID KIT	5 - UNIT
CONTAINER LABELS	10 - UNIT
	16 - UNIT
	24 - UNIT
	36 - UNIT

PROTECTIVE MOUTH BARRIER\*

\* Providing mouth barriers is only recommended for employees trained in performing CPR.

Refer to the Caltrans Warehouse Inventory list for stock item numbers to order supplies. If the contents of a first aid kit do not fit local needs, additional items can be obtained by ordering a larger kit, or by adding single items to the existing kit.

**First aid kits should be inspected monthly.**

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**9.12 FIRST AID AND CARDIO PULMONARY RESUSCITATION (CPR) TRAINING**

The following work groups (**see footnote**) shall be trained in First Aid during the first three (3) months of their assignment, and at least once every three (3) years thereafter:

- **Field personnel in: Highway/Landscape Maintenance, Tree Work, Electrical, Construction, Surveys, Foundation Drillers, Structures Construction and Maintenance, or similar field assignments.**
- **Traveling Mechanics and Preventive Maintenance (P.M.) Mechanics**
- **Volunteer members of the Emergency First Aid Response Teams**

The following work groups (**see footnote**) shall be trained in CPR during the first month of their assignment, and at least once a year thereafter:

- **Tree Maintenance Work (and related classifications)**
- **Electrical Work (and related classifications)**
- **Foundation Drillers**
- **Volunteer members of the Emergency First Aid Response Teams**

With supervisory approval, any employee(s) or work group(s) whose duties may require knowledge and use of First Aid and/or CPR techniques may receive training.

\* \* \* \* \*

First Aid and Cardio Pulmonary Resuscitation (CPR) training shall be consistent with and equivalent to that of the standards and guidelines provided by the American Red Cross, and/or the American Heart Association based on current medical standards.

The instructor shall provide a certificate of completion for each participant. The certificate shall show the employee's name and date of training, or expiration date of the training. Supervisors and employees are responsible to complete training request forms.

Funding for training is allocated from each District or Program Manager operating expense budget. Allocation of funds must be determined by each manager and/or supervisor in cooperation with his/her budget coordinator.

**Footnotes:** 1. Cal-OSHA Construction Safety Orders, Section 1512(b), and the General Industry Safety Orders, Section 3400(b) requires the above listed work groups to be properly trained to render first aid. General Industry Safety Orders, Section 3421(j) requires employees engaged in tree maintenance work to be provided training in first aid and cardio pulmonary resuscitation (CPR).

2. The American Red Cross standard is to provide First Aid training every three (3) years. The American Heart Association standard is to provide CPR training to non-professional personnel every one (1) year.

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**9.13 MOUTH BARRIERS (CPR MASK)**

Mouth barriers; i. e., microshield clear mouth barrier, mask with one-way valves, or similar devices should be made available to employees trained in administering CPR (Cardio-Pulmonary Resuscitation).

NOTE:

See Chapter 8 - HEALTH, MEDICAL, AND SAFETY, Section 8.08, COMMUNICABLE DISEASE PROTECTION, Protection Kits, regarding mouth barrier size and storage.

\* \* \* \* \*

# FIRST AID AND EMERGENCY MEDICAL TREATMENT

JULY 1996

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## EMERGENCY NOTIFICATION INFORMATION

### FORM ADM - 0131

STATE OF CALIFORNIA'S DEPARTMENT OF TRANSPORTATION  
**EMERGENCY NOTIFICATION INFORMATION**  
 ADM-0131 (REV. 1/97) CT #7541-1514-5

#### PERSONAL INFORMATION NOTICE

Pursuant to the Federal Privacy Act (P.L. 93-579) and the Information Practices Act of 1977 (Civil Code Sections 1798, et seq.), notice is hereby given for the request of personal information by this form. The requested personal information is voluntary. The principal purpose of the voluntary information is to facilitate the processing of this form. The failure to provide all or any part of the requested information may delay processing of this form. No disclosure of personal information will be made unless permissible under Article 6, Section 1798.24 of the IPA of 1977. Each individual has the right upon request and proper identification to inspect all personal information in any record maintained on the individual by identifying particular. Direct any inquiries on information maintenance to your IPA Officer.

		DATE
EMPLOYEE NAME	OFFICE PHONE NUMBER	HOME PHONE NUMBER
HOME STREET ADDRESS	CITY, STATE, ZIP CODE	
POSITION NUMBER	DISTRICT/DIVISION	SOCIAL SECURITY NUMBER
SUPERVISOR	OFFICE PHONE NUMBER	

#### PERSONS TO NOTIFY IN CASE OF EMERGENCY

1	NAME	RELATIONSHIP
	HOME STREET ADDRESS	HOME PHONE NUMBER
	CITY, STATE, ZIP CODE	BUSINESS PHONE NUMBER
2	NAME	RELATIONSHIP
	HOME STREET ADDRESS	HOME PHONE NUMBER
	CITY, STATE, ZIP CODE	BUSINESS PHONE NUMBER

#### PREDESIGNATING YOUR PHYSICIAN FOR AN OCCUPATIONAL INJURY/ILLNESS

PHYSICIAN'S NAME	BUSINESS PHONE NUMBER
OFFICE ADDRESS (Include city, state and Zip code)	
MEDICAL INSURANCE COMPANY	MEDICAL CARD NUMBER (If applicable)

#### SPECIAL ASSISTANCE IN AN EMERGENCY

Does employee need special assistance during an emergency? ☐ YES ☐ NO  
 If yes, discuss with employee and notify emergency response personnel.

#### ADDITIONAL MEDICAL INFORMATION


RETURN TO: Department of Transportation  
 Personnel Transactions MS-47  
 1727 - 30th Street, 5th Floor  
 Sacramento, CA 95816

ORIGINAL - Official Personnel File  
 YELLOW - Supervisor  
 PINK - Liaison  
 GOLDENROD - Timekeeper/RAO

## NOTICE TO STATE EMPLOYEES

### FORM STD. 621

### POST IN A CONSPICUOUS PLACE

## NOTICE TO STATE EMPLOYEES



1. **IT IS STATE POLICY** to provide all necessary and reasonable medical treatment for employee injuries or illnesses caused by and/or sustained in the course of State employment.
2. **ALWAYS IMMEDIATELY NOTIFY YOUR SUPERVISOR OF ANY WORK-RELATED INJURY OR ILLNESS.** Your employer will provide you with a notice of potential eligibility for benefits and a claim form on which you must describe the circumstances of the injury. The form should be completed and returned to your supervisor as soon as possible to protect your benefits.

**Any person who makes or causes to be made any knowingly false or fraudulent material statement or material representation for the purpose of obtaining or denying workers' compensation benefits or payments is guilty of a felony.**

3. **SUPERVISORS**, or other trained personnel, shall insure that appropriate first aid is provided. Supervisors, if necessary, shall arrange for prompt treatment from an authorized physician or medical facility.
4. **FIRST AID SUPPLIES** are located in/at:

SERVICE	NAME	ADDRESS	PHONE NO.
AUTHORIZED MEDICAL PROVIDERS:	Med Clinic	3160 Folsom Blvd., Sacramento	733-3390
	Sutter Occupational Health		
	Services	1201 Alhambra Blvd., Suite 210	731-7725
PARAMEDICS:		9-911 and	654-5028
AMBULANCE SERVICES:		9-911 and	654-5028
OTHER:	<del>XXXXXX</del> CHP	9-911 and	654-5028
	Local Police and Fire ...	9-	<b>9-1-1</b>
	Poison Control Center ...	(1-800-876-4766)	734-3692

5. **EMPLOYEES** may be treated by their designated personal physician following a work-related injury or illness. For this, a physician designation form must be completed and on file with the employer prior to the injury or illness.
6. **SUPERVISORS** must complete the Supervisor's Review Section on the reverse side of State Fund Form 3067 Employers Report of Injury or Occupational Illness or approved equivalent following all work-related injuries or illnesses.
7. **COMPENSATION PAYMENTS** will be made in accordance with State Law and, if applicable, your choice of available benefit options.
8. **VOCATIONAL REHABILITATION** benefits and services will be provided to qualified employees if their work-related injuries or illnesses prevent them from returning to their regular assignment.
9. **DEATH BENEFITS** will be paid to qualified dependents as provided by law.
10. **STATE COMPENSATION INSURANCE FUND**, as either adjusting agent or insurance carrier, adjusts all State employee workers' compensation claims. For further information call:

NAME	PHONE NO. (CALNET IF APPLICABLE)
State Compensation Insurance Fund	(916) 567-7500

**OR**

Information and Assistance Officer, Division of Workers' Compensation	
CITY	PHONE NO. (CALNET IF APPLICABLE)
Sacramento	(916) 263-2741

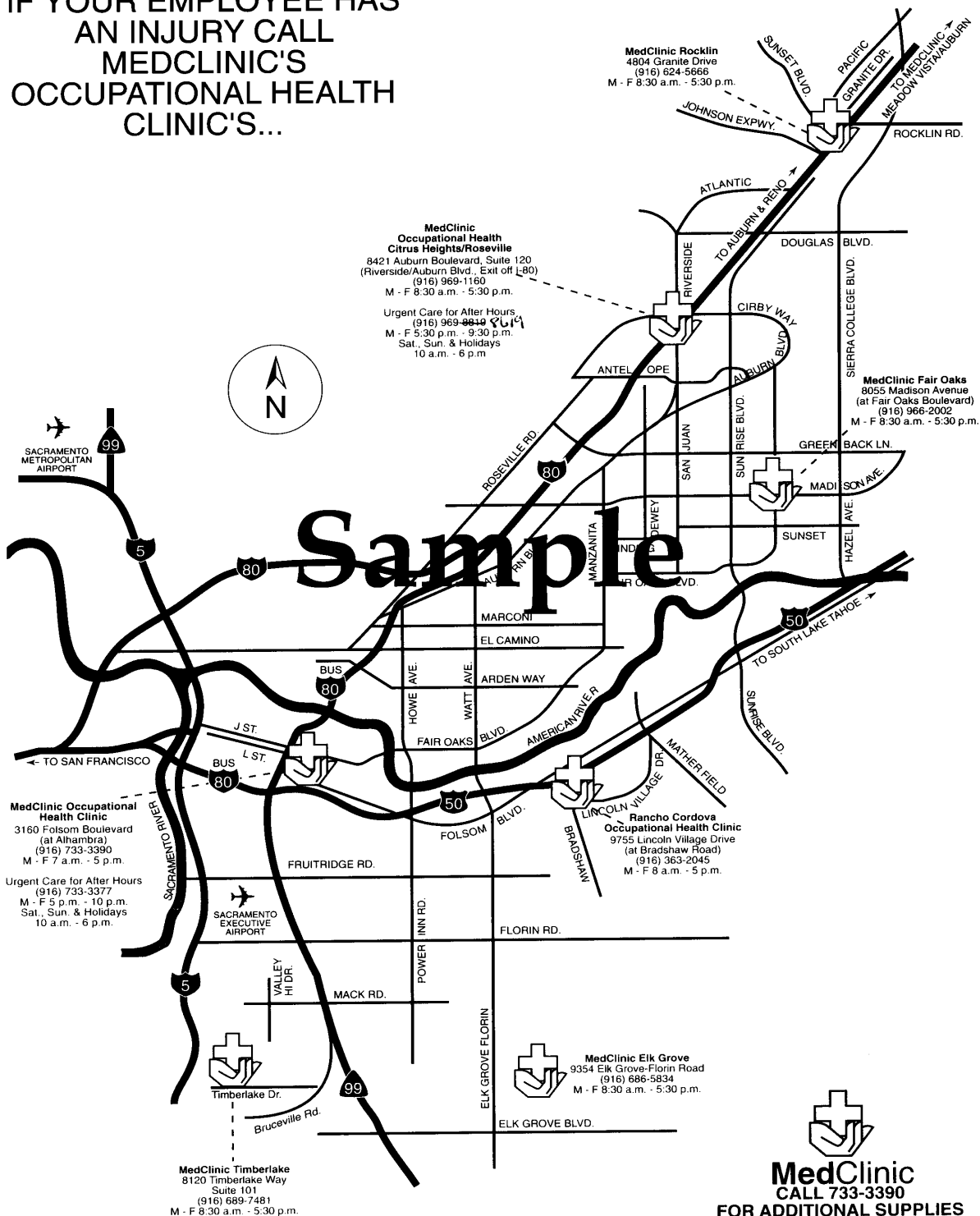
11. **OFF-DUTY RECREATIONAL, SOCIAL, OR ATHLETIC ACTIVITY:** Your agency, or the insurance carrier may not be liable for the payment of workers' compensation benefits for any injury which arises out of an employee's voluntary participation in any off-duty recreational, social, or athletic activity which is not part of the employee's work-related duties.

12. This form was prepared by:
 

NAME	DATE	PHONE NO. (CALNET IF APPLICABLE)
Office of Safety and Health	5/20/98	(916) 227-2640

## SAMPLE MAP SHOWING MEDICAL CLINICS

IF YOUR EMPLOYEE HAS  
AN INJURY CALL  
MEDCLINIC'S  
OCCUPATIONAL HEALTH  
CLINIC'S...



January 2000

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# CHAPTER 10

## **REPORTING PERSONAL INJURIES AND ILLNESSES**

### **HOW TO REPORT AND DOCUMENT OCCUPATIONAL INJURIES AND ILLNESSES**

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## REPORTING INJURIES AND ILLNESSES

JULY 1996

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# CHAPTER 10

## **REPORTING PERSONAL INJURIES AND ILLNESSES**

### **HOW TO REPORT AND DOCUMENT OCCUPATIONAL INJURIES AND ILLNESSES**

#### **10.00 INTRODUCTION**

This chapter explains the step-by-step procedures required to complete and process specific forms used to report and document occupational injuries and illnesses from first aid to emergency medical treatment at a medical facility.

See Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT which describes procedures for requesting first aid, first aid teams, and emergency transportation to a medical facility.

This chapter does not cover reporting serious occupational injury, illness, or fatality that are subject to special Cal-OSHA requirements. See Chapter 19 - SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS, OR FATALITY, which describes the Departmental Reporting Protocol.

#### **10.01 PURPOSE**

The purpose of this chapter is to provide an explanation of the forms used to document occupational injuries or illnesses. The process includes documenting non-emergency medical care and arranging for emergency medical care at a clinic or hospital.

#### **10.02 POLICY STATEMENT**

Supervisors are responsible to report and document occupational injuries and illnesses, and arrange for appropriate workers' compensation benefits to employees who are injured or contract an illness arising out of their employment.

#### **10.03 CALIFORNIA WORKERS' COMPENSATION PROGRAM**

The California Workers' Compensation Program was established by the State Legislature to provide employees who incur an occupational injury or illness appropriate and reasonable medical care and indemnity payments (or their dependents in the event of an employee's work-related death) as necessary.

**10.04 STATE COMPENSATION INSURANCE FUND (SCIF)**

The State Compensation Insurance Fund (SCIF) is the State agency that acts as the Department's insurance adjusting agent in the administration of the Workers' Compensation Program. SCIF directs the worker's compensation claims process, medical contacts, medical payments, disability payments, and death benefits.

**10.05 OVERVIEW OF CALTRANS WORKERS' COMPENSATION PROGRAM**

The Caltrans Workers' Compensation Program is administered by the Office of Personnel Services, Workers' Compensation Case Management Unit in the Administrative Service Center, and by District Safety and Health Officers. The Case Manager or District Safety and Health staff person coordinates the claim with SCIF regarding medical contacts, medical payments, disability payments, and death benefits.

- Work-Related or Occupational Injury or illness

It is the goal of the Department to return an injured or ill employee to work as soon as medically possible following recuperation from the affects of a work-related injury or illness.

If it is determined that an employee will not be able to return to his/her normal duties as a result of a work-related injury or illness, a Workers' Compensation Case Manager and/or District Safety and Health staff will attempt to place the employee in another position, or if appropriate, a modified position.

- Non work-Related Injury or Illness

In order to accommodate employees who become disabled because of a non-work related injury or illness management can provide assistance to retain an employee through a process known as Reasonable Accommodation.

This program is used by employees who have a non work related disability. The affected employee must file a request for Reasonable Accommodation with his/her supervisor. For further guidance, consult the Caltrans Reasonable Accommodation Guide or contact the Office of Personnel Operations, Reasonable Accommodation Coordinator in the Administrative Service Center.

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**NOTE:**

The State Compensation Insurance Fund (SCIF) and Cal-OSHA require specific reporting procedures to maintain records of occupational injuries and illnesses. To comply with these instructions, Caltrans management uses several forms to record the information.

The following describes the forms and the approximate sequence in which they are used to report and document occupational injuries and illnesses.

**10.06 HOW TO USE Form PM-S-0066, "REPORT OF MINOR INJURY"**

This is a Caltrans form. It is used to report **ONLY** minor occupational injuries or illnesses that do not require professional medical attention.

This form is not required if the injured and ill employee is taken to a medical facility for treatment. (See Section 10.08 for Form PM-S-0037.)

The Form PM-S-0066 is a small, green, 4 inch X 5-1/2 inch form.

A minor injury or illness is broadly defined as:

AN INJURY OR ILLNESS THAT REQUIRES ONLY FIRST AID AND WOULD NOT REQUIRE THE ATTENTION OF A DOCTOR OR OTHER MEDICALLY TRAINED PERSON OR A VISIT TO A MEDICAL CLINIC.

First aid for minor cuts and bruises, removing a splinter, or other minor treatment that would be limited to the items found in State-approved first aid kits are normally classified as minor injuries.

Upon receiving information about a minor injury, or illness the supervisor shall do the following:

- a. Give a Report of Minor Injury, Form (PM-S-0066), to the injured or ill employee to complete. (If the employee is unable to, the supervisor may fill out the form for the employee.)
- b. The supervisor must sign the form.
- c. The supervisor's signature is not an admission of liability; it simply means that the supervisor is aware of the incident/accident as reported by the employee.

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NOTE:

The supervisor is responsible to review the circumstances surrounding the reported injury or illness and prepare a written report. See Chapter 4 - ACCIDENT INVESTIGATION AND ANALYSIS for more details.

Completing the Form PM-S-0066 ensures that the accident has been properly reported, documented, and the employee's benefits are protected.

1. The supervisor is required to send the completed REPORT OF MINOR INJURY, Form PM-S-0066, to:
  - the District Safety and Health Office for District employees
  - the Workers' Compensation Case Manager's Office for Headquarters-sourced employees.
2. The District Safety and Health Officers and Workers' Compensation Case Manager will file and retain copies of the Form PM-S-0066 for one (1) year.

SPECIAL NOTE No. 1:

It is important to understand that a minor injury and initial first aid treatment reported on a "Green Slip" (Form 66), may develop into a more serious medical problem in the future. Supervisors and employees should not assume that filing a "Green Slip" is the end of the reporting process.

SPECIAL NOTE No. 2:

If the injury/accident qualifies for an "exposure record", because of a toxic chemical exposure and falls under the Cal-OSHA regulations, the record must be maintained for 30 years. Contact the Safety and Health Office for more details.

A sample of Form PM-S-0066, REPORT OF MINOR INJURY, is included at the end of this chapter.

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**10.07 HOW TO USE Form "SCIF 3301"****"EMPLOYEE'S CLAIM FOR WORKERS' COMPENSATION BENEFITS"**

This is a Department of Industrial Relations, Division of Workers' Compensation form used to report occupational injuries or illnesses.

The State Compensation Insurance Fund (SCIF) is the insurance adjusting agent for the State departments. Therefore, the form is referred to as "Form SCIF 3301." The form is 8-1/2 inches X 11 inches. The form is printed on four (4) pages of carbonized paper. Each page is clearly marked to identify how each page is processed. Page one is marked STATE FUND COPY, page two is marked EMPLOYER'S COPY, page three is marked EMPLOYEE'S COPY, and the last page is marked EMPLOYEE'S TEMPORARY RECEIPT.

Upon receiving information that an injury occurred or an employee has become ill, the supervisor shall:

- a. Give the employee a copy of the Form SCIF 3301 within 24 hours of becoming aware of an injury or illness.
- b. The employee shall complete the form as described in the written instructions.
- c. Within **one working** day of the receipt of a completed Form 3301 from an employee, the supervisor shall complete his/her section of the form and give a dated copy to the employee.
- d. The supervisor shall send the other copies to either the District Safety and Health Office, or the Workers' Compensation Case Manager immediately.
- e. The District Safety and Health Office or the Workers' Compensation Case Manager is responsible to ensure that the form is completed and the information is processed in compliance with established procedures.

A sample of the Form SCIF 3301, EMPLOYEE'S CLAIM FOR WORKERS' COMPENSATION BENEFITS, is included at the end of this chapter.

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**10.08 HOW TO USE Form PM-S-0037****"MEDICAL TREATMENT AUTHORIZATION"**

This form is used whenever an injured or ill employee is taken to a clinic or hospital for medical treatment by a physician or other medical professional.

Form PM-S-0037 is 8-1/2 inches X 11 inches. The original is sent to the Workers' Compensation Case Manager or to the District Safety and Health Office. One copy should be given to the treating physician or medical provider, and one copy for the supervisor.

Completed copies must be sent to:

- the District Safety and Health Office for District-sourced employees
- the Workers Compensation Case Manager Unit for Headquarters-sourced employees

The Medical Treatment Authorization form represents a financial authorization from Caltrans, and SCIF, to provide medical treatment to the employee and ensures that payment for services by the medical provider will be paid by the employer through SCIF.

- **When to use the MEDICAL TREATMENT AUTHORIZATION**

Whenever an employee is injured or becomes ill, the supervisor shall do the following:

1. Obtain a copy of the Form PM-S-0037 from the Safety and Health Office or Workers' Compensation Case Management Office.
2. Accompany the injured or ill employee to the medical provider and give a signed copy of the form to the medical provider.  
  
(The form provides information regarding the availability of modified work that may be necessary based upon the injury or illness and advice of the attending physician.)
3. Discuss the injuries with the attending physician in order to determine the affected employee's ability to return to work and perform a full range of duties.

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The form must indicate any limitations placed upon the injured or ill employee and any necessary follow-up treatment or appointments, and must be signed by the attending physician before leaving the medical facility.

The form provides for the development of a MODIFIED WORK ASSIGNMENT AGREEMENT based on the physician's statement for the injured employee.

An example of the MEDICAL TREATMENT AUTHORIZATION, Form PM-S-0037, is included at the end of this chapter. The form may be modified to fit local needs.

\* \* \* \* \*



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**10.09 HOW TO USE Form SCIF 3067****"EMPLOYER'S REPORT OF OCCUPATIONAL INJURY OR ILLNESS"**

This is a State Compensation Insurance Fund (SCIF) form. This form must be filed with SCIF within five (5) working days (DO NOT DELAY SENDING THE FORM TO THE WORKERS' COMPENSATION CASE MANAGEMENT OFFICE OR TO THE DISTRICT SAFETY OFFICE) following an occupational injury or illness which:

- 1) results in lost time beyond the day of injury, or
- 2) requires professional medical treatment.

The front of the form provides space for specific information about the injury or illness. The reverse of the form provides for the supervisor's and manager's review. Both sides must be filled out completely by the supervisor.

Upon receiving information about an injury or illness, the first-line supervisor shall do the following:

- a. Fill out an EMPLOYER'S REPORT OF OCCUPATIONAL INJURY OR ILLNESS.
- b. Original form must be sent to:
  - the District Safety and Health Office for District-sourced employees,
  - the Workers Compensation Manager's Office for Headquarters-sourced employees.

Section 2581.4 of the State Administrative Manual (SAM) requires:

1. **"SOMEONE OTHER THAN AND SUPERIOR TO THE INJURED PERSON SHOULD FILL OUT THE FORM."**
2. **"The form shall NOT be completed by the injured employee, and UNDER NO CIRCUMSTANCES IS THE INJURED EMPLOYEE TO SIGN THE SCIF FORM 3067."**
3. "This form is state management's report of the incident to SCIF and is considered confidential."

The District Safety and Health Officer or the Workers' Compensation Case Manager is responsible to send the completed Form SCIF 3067 to the State Compensation Insurance Fund (SCIF).

A sample of the Form SCIF 3067, EMPLOYER'S REPORT OF OCCUPATIONAL INJURY OR ILLNESS, is included at the end of this chapter.

**10.10 HOW TO USE Form STD. 634****“ABSENCE AND ADDITIONAL TIME WORKED REPORT”**

The Form STD. 634 is used to record employee absences associated with occupational injuries or illnesses. The form is used in addition to electronic or written time reporting procedures. (See next page for details.)

Supervisors are responsible to give a copy of the form to an injured or ill employee whenever they are off work because of a work-related injury or illness.

The employee shall record all absences on the form for each pay period or portion thereof, attach copies of required medical documents, and submit the form to their supervisor for approval. All medical documents must be signed by a physician. If the employee is unable to complete the form, the supervisor shall complete the form and sign for the employee.

The supervisor is responsible to review the Form STD. 634, verify the employee was absent on the day(s) indicated or portions thereof, sign, and date the form. The supervisor sends the Form STD. 634 and the original medical documents to the Workers' Compensation Personnel Transaction Unit.

All records of time worked or time-off, electronic or written, must be submitted in the usual manner by the employee or supervisor to the attendance person and other appropriate person or location for handling and processing.

Unless otherwise directed, the time off associated with an occupational injury or illness is charged to the employee's leave credits; i.e., sick leave, vacation, annual leave, or other leave credit. (The employee receives full pay for the day of injury or illness and no charge is made for the absence.) If an employee has insufficient or no leave credits available to charge for the period of absence, the time off is reported as “dock” on the Form STD. 634.

**Employees shall not charge any time off to Industrial Disability Leave (IDL) unless instructed to do so by the Personnel Transactions Workers' Compensation Unit.**

The State Compensation Insurance Fund (SCIF) is responsible to verify and approve all claims for benefits related to an occupational injury or illness. Once the claim has been approved, SCIF may verify the employee's time off as Industrial Disability Leave (IDL), at which time the employee's previously used leave credits may be restored. The Personnel Transactions Workers' Compensation Unit will notify the employee, the supervisor, and others accordingly.

---

Time off associated with an occupational injury or illness must be reported on the Form STD. 634 as outlined below:

1. Electronic Time Reporting –

- Maintenance employees reporting time through MERS, and
- Staff employees reporting time through TRS:

A Form STD. 634 is used in addition to electronic time reporting. Enter the symbol and number of hours in date blocks for each day or portion thereof, and draw a circle around the number. Write “Work-related injury or illness” and the claim number on the form.

2. Written Time Reporting –

- Staff employees utilizing a Staff Time Sheet, Form FA-708:

Employee must complete both Form FA-708 and Form STD. 634. The hours are entered on Form STD. 634 as described above. The same hours are also entered on the Form FA-708 and circled. Write “Work-related injury or illness” and the claim number on the form.

A sample of the Form STD. 634 is included at the end of this chapter.

### 10.11 HOW TO USE Form “PM-S-0067”

#### “DATA INPUT FOR PERSONAL INJURY ACCIDENT”

This is a Caltrans form used for the Safety Information Management System (SIMS) program. The Data Input Form PM-S-0067 is the last official document required in the sequence of events following the reporting of an occupational injury or illness.

The form must be filled out in order to ensure that an injury or illness has been properly documented and is included in the SIMS computer data base. The form is for internal Departmental use only.

The form **is filled out by the supervisor** and he/she sends it to:

- For **District employees**: the District Safety and Health Office.

The District Safety and Health Office staff reviews and verifies the information and enters the data into SIMS.

- 
- For **Headquarters-sourced employees**: the Workers' Compensation Case Management Office at the Administrative Service Center.

The Workers' Compensation Case Management Office reviews the information and then forwards the form to the Headquarters Office of Safety and Health in the Administrative Service Center.

The Headquarters Office of Safety and Health reviews and verifies the information and enters the data into SIMS.

The purpose of the "Data Input For Personal Injury Accident" form is:

- a) To collect data that will identify the employee, the equipment, and detailed information describing the physical and environmental conditions surrounding the accident.
- b) Based upon the information provided by the employee, and after completing an investigation, the first-line supervisor fills out the front of the form. All boxes describing physical and environmental conditions must be filled.
- c) Supervisors are responsible to ensure that all of the data fields have been reviewed and all the information on the computer input document is complete and accurate. Call the District Safety and Health Office or Workers' Compensation Case Manager's Office if you need assistance.

NOTE:

Before the information is "keyed" into the SIMS data base, the Safety Office staff (District or Headquarters) reviews the supervisor's comments for completeness and accuracy. If the information is incomplete and/or there are errors, the original Form PM-S-0067 will be returned to the supervisor for correction and/or for additional information as may be indicated.

A sample of the DATA INPUT FOR PERSONAL INJURY ACCIDENT, Form PM-S-0067, is included at the end of this chapter.

**10.12 HOW TO USE Form PM-S-0004****“MODIFIED WORK ASSIGNMENT AGREEMENT”**

This form is used to document a formal written agreement between management and an injured or ill employee. The modified work assignment establishes a transition period in order to allow an employee to return to his/her position without loss of pay and benefits. It is also used to document the physical limitations established by a physician as the result of an occupational injury or illness.

Modified work is a temporary work assignment during the recuperation of an injured or ill employee. A modified work assignment allows an injured or ill employee the opportunity to return to work and perform special short-term projects/ assignments or limited tasks of usual and customary duties.

ALL MODIFIED WORK AGREEMENTS MUST HAVE WRITTEN MEDICAL SUBSTANTIATION ATTACHED TO THE AGREEMENT DOCUMENT.

The effective dates of the modified work assignment should not exceed ninety (90) calendar days. Extensions may be granted on a case by case basis after consultation with the Worker's Compensation Case Manager or the District Safety Officer as appropriate.

A MODIFIED WORK ASSIGNMENT AGREEMENT, Form PM-S-0004, lists the employee's name, job title, date of injury/illness, and effective dates of the modified work assignment.

Supervisors must ensure that the injured or ill employee has read, understands, and agrees to the provisions of the agreement before it can be approved.

- **When to use a “Modified Work Assignment Agreement”**

Supervisors shall make every effort to provide temporary modified work assignments for employees with occupational or non-occupational injuries or illnesses when their treating physician indicates:

- 1) That the employee is not able to perform the full range of duties for a specific transition period of time.
- 2) That the employee is able to perform a limited range of duties or other productive work during a specific transition period of time.

A sample MODIFIED WORK ASSIGNMENT AGREEMENT, Form PM-S-0004, is included at the end of this chapter.

**REPORT OF MINOR INJURY****Form PM-S-0066****“THE GREEN SLIP”**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION		FRONT
<b>REPORT OF MINOR INJURY</b>		
PM-S-0066 (REV. 10/97) 7541-8502-7		
<b>FORWARD ORIGINAL TO DISTRICT SAFETY OFFICE OR WCCM</b>	DISTRICT NUMBER	UNIT/COST CENTER
EMPLOYEE'S NAME (Print)	BUSINESS PHONE	
SUPERVISOR'S NAME (Print)	BUSINESS PHONE	
DATE OF INJURY	TIME OF INJURY	DATE INJURY REPORTED
WHERE DID INCIDENT OCCUR	<div style="border: 1px solid black; padding: 20px; text-align: center; font-size: 48px;">Sample</div>	
<div style="border: 1px solid black; padding: 5px;"><b><u>CONFIDENTIAL</u></b> This document contains personal information and pursuant to Civil Code 1798.21 it shall be kept confidential in order to protect against unauthorized disclosure.</div>		

<b>REPORT OF MINOR INJURY</b>	BACK
PM-S-0066 (REV. 10/97) 7541-8502-7	
DESCRIBE INJURY AND HOW IT OCCURRED	
TREATMENT	<div style="border: 1px solid black; padding: 20px; text-align: center; font-size: 48px;">Sample</div>
EMPLOYEE'S SIGNATURE	
SUPERVISOR'S SIGNATURE	

**MEDICAL TREATMENT AUTHORIZATION****Form PM-S-0037**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

**MEDICAL TREATMENT AUTHORIZATION**

PM-S-0037 (REV 3/1997)

The supervisor will take the injured to the doctor for treatment.

**ADJUSTING AGENT**  
STATE COMPENSATION INSURANCE FUND

**CALTRANS USE ONLY**

- ☐ First Aid ONLY, not reportable  
☐ Injured Treatment report to Cal-OSHA

**PERSONAL INFORMATION NOTICE**

Pursuant to the Federal Privacy Act (P.L. 93-579) and the Information Practices Act of 1977 (Civil Code Sections 1798, et seq.), notice is hereby given for the request of personal information by this form. The requested personal information is voluntary. The principal purpose of the voluntary information is to facilitate the processing of this form. The failure to provide all or any part of the requested information may delay processing of this form. No disclosure of personal information will be made unless permissible under Article 6, Section 1798.24 of the IPA of 1977. Each individual has the right upon request and proper identification, to inspect all personal information in any record maintained on the individual by an identifying particular. Direct any inquiries on information maintenance to your IPA Officer.

* EMPLOYEE'S NAME	UNIT	COST CENTER	BUSINESS PHONE
* SUPERVISOR'S NAME			BUSINESS PHONE
* AUTHORIZED SIGNATURE			DATE

**TO ATTENDING PHYSICIAN:**

*The form represents authorization to treat the above employee for a work incurred injury or illness.*

*The Department of Transportation provides short-term, modified work assignments for employees' work-related injuries in order that time away from work may be kept to a minimum. Please consider the availability of this modified work before making a decision on our employee's estimated period of disability. Because of our varied work activities, usually some type of employment can be found to meet injured employee's medical limitations.*

*If you have any questions regarding modified work assignments, please contact Caltrans District Safety Office or your Worker's Comp. Case Manager.*

*Please complete the items on the form below and return with employee.*

**INJURY STATUS REPORT****TREATMENT ADMINISTERED**

- ☐ Office visit injury treatment  
☐ Redress  
☐ Medication  
☐ Physical therapy  
☐ Physical exam (results will be transmitted by other means)  
☐ If presently working, return before or after shift on:  
\_\_\_\_ / \_\_\_\_ / \_\_\_\_

**WORK STATUS**

- ☐ Return to regular work  
Date: \_\_\_\_\_  
☐ Return to modified work  
\_\_\_\_\_ days  
☐ Unable to return to work for duration of disability  
\_\_\_\_\_ days  
☐ On schedule established by initial report \_\_\_\_\_  
☐ Re-evaluation or comments:  
\_\_\_\_\_  
\_\_\_\_\_

**MODIFIED WORK AS INDICATED BELOW**

- \_\_\_\_ 1. No prolonged standing or walking  
\_\_\_\_ 2. No climbing, bending, or stooping  
\_\_\_\_ 3. Limited use of the right/left hand  
\_\_\_\_ 4. Right/Left handed work only  
\_\_\_\_ 5. No work near moving machinery during modified work \_\_\_\_\_  
\_\_\_\_ 6. No twisting motion  
\_\_\_\_ 7. Weight lifting restriction:  
\_\_\_\_ 0 - 15 pounds  
\_\_\_\_ 15 - 35 pounds  
\_\_\_\_ 35 - 50 pounds

**DOCTOR'S COMMENTS**


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DOCTOR'S NAME

BUSINESS ADDRESS

DOCTOR'S SIGNATURE

BUSINESS PHONE

Complete original and 2 copies, distribute as follows:

- Original to District Safety Officer or WCCM
- Copy to physician
- Copy to supervisor or injured/ill employee
- \* Fill in by supervisor

**NOTE:** This form shall be given to the physician along with any explanation necessary.

**EMPLOYEE'S CLAIM FOR WORKERS' COMPENSATION BENEFITS****Form SCIF 3301**

State of California  
Department of Industrial Relations  
DIVISION OF WORKERS' COMPENSATION



Estado de California  
Departamento de Relaciones Industriales  
DIVISION DE COMPENSACIÓN AL TRABAJADOR

**EMPLOYEE'S CLAIM FOR  
WORKERS' COMPENSATION BENEFITS**

**PETICION DEL EMPLEADO PARA BENEFICIOS  
DE COMPENSACIÓN DEL TRABAJADOR**

If you are injured or become ill because of your job, you may be entitled to workers' compensation benefits.

Si Ud. se ha lesionado o se ha enfermado a causa de su trabajo, Ud. tiene derecho a recibir beneficios de compensación al trabajador.

Complete the "Employee" section and give the form to your employer. Keep the copy marked "Employee's Temporary Receipt" until you receive the dated copy from your employer. You may call the Division of Workers' Compensation at 1-800-736-7401 if you need help in filling out this form or in obtaining your benefits. An explanation of workers' compensation benefits is included on the back of this form.

Complete la sección "Empleado" y entregue la forma a su empleador. Quédese con la copia designada "Recibo Temporal del Empleado" hasta que Ud. reciba la copia fechada de su empleador. Si Ud. necesita ayuda para completar esta forma o para obtener sus beneficios, Ud. puede hablar con la Division de Compensación al Trabajador llamando al 1-800-736-7401. En la parte de atrás de esta forma se encuentra una explicación de los beneficios de compensación al trabajador.

You should also have received a pamphlet from your employer describing workers' compensation benefits and the procedures to obtain them.

Ud. también debería haber recibido de su empleador un folleto describiendo los beneficios de compensación al trabajador lesionado y los procedimientos para obtenerlos.

Any person who makes or causes to be made any knowingly false or fraudulent material statement or material representation for the purpose of obtaining or denying workers' compensation benefits or payments is guilty of a felony.

Toda aquella persona que a propósito haga o cause que se produzca cualquier declaración o representación material falsa o fraudulenta con el fin de obtener o negar beneficios o pagos de compensación a trabajadores lesionados es culpable de un crimen mayor "felonia".

**Employee: Empleado:**

1. Name. Nombre. \_\_\_\_\_ Today's Date. Fecha de Hoy. \_\_\_\_\_
2. Home address. Dirección Residencial. \_\_\_\_\_
3. City. Ciudad. \_\_\_\_\_ State. Estado. \_\_\_\_\_ Zip. Código Postal. \_\_\_\_\_
4. Date of Injury. Fecha de la lesión (accidente). \_\_\_\_\_ Time of injury. Hora en que ocurrió \_\_\_\_\_ a.m. \_\_\_\_\_ p.m.
5. Address and description of where injury happened. Dirección/lugar dónde ocurrió el accidente. \_\_\_\_\_
6. Describe injury and part of body affected. Describa la lesión y parte del cuerpo afectada. \_\_\_\_\_
7. Social Security Number. Número de Seguro Social del Empleado \_\_\_\_\_
8. Signature of employee. Firma del empleado. \_\_\_\_\_

**Employer - complete this section and give the employee a copy immediately as a receipt.  
Empleador - complete esta sección y déle inmediatamente una copia al empleado como recibo.**

9. Name of employer. Nombre del empleador. \_\_\_\_\_
10. Address. Dirección. \_\_\_\_\_
11. Date employer first knew of injury. Fecha en que el empleador supo por primera vez de la lesión o accidente. \_\_\_\_\_
12. Date claim form was provided to employee. Fecha en que se le entregó al empleado la petición. \_\_\_\_\_
13. Date employer received claim form. Fecha en que el empleado devolvió la petición al empleador. \_\_\_\_\_
14. Name and address of insurance carrier or adjusting agency. Nombre y dirección de la compañía de seguros o agencia administradora de seguros. **STATE COMPENSATION INSURANCE FUND** \_\_\_\_\_
15. Insurance Policy Number. El número de la póliza del Seguro. \_\_\_\_\_
16. Signature of employer representative. Firma del representante del empleador. \_\_\_\_\_
17. Title. Título. \_\_\_\_\_ 18. Date. Fecha. \_\_\_\_\_ 19. Telephone. Telefono. \_\_\_\_\_

**Employer:** You are required to date this form and provide copies to your insurer or claims administrator and to the employee, dependent or representative who filed the claim within **one working day** of receipt of the form from the employee.

**Empleador:** Se requiere que Ud. feche esta forma y que provea copias a su compañía de seguros, administrador de reclamos, o dependiente representante de reclamos y al empleado que hayan presentado esta petición dentro del plazo de **un día hábil** desde el momento de haber sido recibida la forma del empleado.

SIGNING THIS FORM IS NOT AN ADMISSION OF LIABILITY

**STATE  
COMPENSATION  
INSURANCE  
FUND**

EL FIRMAR ESTA FORMA NO SIGNIFICA ADMISION DE RESPONSABILIDAD

SCIF 3301 (REV. 6-95) - DWC Form 1 (REV. 1-94)

STATE FUND COPY

THIS FORM IS NOT SHOWN FULL SIZE.



## REPORTING INJURIES AND ILLNESSES

JULY 1996

10-18

**EMPLOYERS' REPORT OF OCCUPATIONAL INJURY OR ILLNESS****Form SCIF 3067**

<b>State of California</b> <b>EMPLOYER'S REPORT OF OCCUPATIONAL INJURY OR ILLNESS</b>		Please complete in triplicate (type, if possible). Mail original and one copy to: <b>STATE COMPENSATION INSURANCE FUND</b> <i>Refer to STATE ADMINISTRATIVE MANUAL, SECTIONS 2581.2 – 2581.5 for instructions on completion and routing.</i> <b>BOTH SIDES OF THIS FORM MUST BE COMPLETED</b>		<b>OSHA Case No.</b>  <input type="checkbox"/> Fatality
Any person who makes or causes to be made any knowingly false or fraudulent material statement or material representation for the purpose of obtaining or denying workers' compensation benefits or payments is guilty of a felony.		NOTICE: California law requires employers to report within <b>five days</b> of knowledge every occupational injury or illness which results in lost time beyond the date of the incident <b>OR</b> requires medical treatment beyond first aid. If an employee subsequently dies as a result of a previously reported injury or illness, the employer must file within <b>five days</b> of knowledge an amended report indicating death. In addition, every serious injury/illness, or death must be reported <b>immediately</b> by telephone or telegraph to the nearest office of the California Division of Occupational Safety and Health.		
E M P L O Y E R	1. DEPARTMENT	1A. AGENCY CODE OR SCIF POLICY NUMBER	DO NOT USE THIS COLUMN	
	2. MAILING ADDRESS (Number and Street, City, ZIP)	2A. PHONE NUMBER	Case No.	
	3. LOCATION, IF DIFFERENT FROM MAILING ADDRESS (Number and Street, City, ZIP)	3A. DIV./LOCATION CODE	Ownership	
	4. NATURE OF BUSINESS Governmental Agency	5. STATE UNEMPLOYMENT INSURANCE ACCT. NO.	Industry	
E M P L O Y E E	6. TYPE OF EMPLOYER <input type="checkbox"/> PRIVATE <input checked="" type="checkbox"/> STATE <input type="checkbox"/> CITY <input type="checkbox"/> COUNTY <input type="checkbox"/> SCHOOL DIST. <input type="checkbox"/> OTHER GOVERNMENT - SPECIFY _____			Occupation
	7. EMPLOYEE NAME	8. SOCIAL SECURITY NUMBER	9. DATE OF BIRTH (mm/dd/yy)	Sex
	10. HOME ADDRESS (Number and Street, City, ZIP)	10A. PHONE NUMBER	Age	
	11. SEX <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	12. OCCUPATION (Regular job title—No initials, abbreviations or numbers)	13. DATE OF HIRE (mm/dd/yy)	Daily hours
I N J U R Y  O R  I L L N E S S	14. EMPLOYEE USUALLY WORKS _____ hours per day _____ days per week _____ total weekly hours	14A. EMPLOYMENT STATUS (See instructions in 14A continued below.) regular full-time _____ part-time _____ temporary _____ seasonal _____	14B. Under what class code of your policy were wages assigned?	Days per week
	15. GROSS WAGES/SALARY \$ _____ per _____	16. OTHER PAYMENTS NOT REPORTED AS WAGES/SALARY (e.g., tips, meals, lodging, overtime, bonuses, etc.)? <input type="checkbox"/> YES \$ _____ per _____ <input type="checkbox"/> NO	Weekly hours	
	17. DATE OF INJURY OR ONSET OF ILLNESS (mm/dd/yy)	18. MILITARY TIME INJURY/ILLNESS OCCURRED	19. MILITARY TIME EMPLOYEE BEGAN WORK (mm/dd/yy)	20. IF EMPLOYEE DIED, DATE OF DEATH (mm/dd/yy)
	21. UNABLE TO WORK FOR AT LEAST ONE FULL DAY AFTER DATE OF INJURY? <input type="checkbox"/> YES <input type="checkbox"/> NO	22. DATE LAST WORKED (mm/dd/yy)	23. DATE RETURNED TO WORK (mm/dd/yy)	24. IF STILL OFF WORK, CHECK THIS BOX <input type="checkbox"/>
I N J U R Y  O R  I L L N E S S	25. PAID FULL WAGES FOR DAY OF INJURY OR LAST DAY WORKED? <input type="checkbox"/> YES <input type="checkbox"/> NO	26. SALARY BEING CONTINUED? <input type="checkbox"/> YES <input type="checkbox"/> NO	27. DATE OF EMPLOYER'S KNOWLEDGE/NOTICE OF INJURY/ILLNESS (mm/dd/yy)	28. DATE EMPLOYEE WAS PROVIDED EMPLOYEE CLAIM FORM (mm/dd/yy)
	29. SPECIFIC INJURY/ILLNESS AND PART OF BODY AFFECTED, MEDICAL DIAGNOSIS, if available, e.g., second degree burns on right arm, tendonitis of left elbow, lead poisoning.			Part of body
	30. LOCATION WHERE EVENT OR EXPOSURE OCCURRED (Number, Street, City)	30A. COUNTY	30B. ON EMPLOYER'S PREMISES? <input type="checkbox"/> YES <input type="checkbox"/> NO	
	31. DEPARTMENT WHERE EVENT OR EXPOSURE OCCURRED, e.g., shipping department, machine shop.	32. OTHER WORKERS INJURED/ILL IN THIS EVENT? <input type="checkbox"/> YES <input type="checkbox"/> NO		Event
33. EQUIPMENT, MATERIALS AND CHEMICALS THE EMPLOYEE WAS USING WHEN EVENT OR EXPOSURE OCCURRED, e.g., acetylene, welding torch, farm tractor, scaffold.			Sec. Source	
34. SPECIFIC ACTIVITY THE EMPLOYEE WAS PERFORMING WHEN EVENT OR EXPOSURE OCCURRED, e.g., welding seams of metal forms, loading boxes onto truck.			Extent of Injury	
35. HOW INJURY/ILLNESS OCCURRED. DESCRIBE SEQUENCE OF EVENTS. SPECIFY OBJECT OR EXPOSURE WHICH DIRECTLY PRODUCED THE INJURY/ILLNESS, e.g., worker stepped back to inspect work and slipped on scrap material. As he fell, he brushed against fresh weld, and burned right hand. USE SEPARATE SHEET IF NECESSARY.				
36. NAME AND ADDRESS OF PHYSICIAN (Number and Street, City, ZIP)			36A. PHONE NUMBER	
37. IF HOSPITALIZED AS AN INPATIENT, NAME AND ADDRESS OF HOSPITAL (Number and Street, City, ZIP)			37A. PHONE NUMBER	
38. WAS ANOTHER PERSON RESPONSIBLE? <input type="checkbox"/> YES <input type="checkbox"/> NO		39. PERS/STRS MEMBERS <input type="checkbox"/> YES <input type="checkbox"/> NO	40. ARE LEAVE CREDITS AVAILABLE TO BE USED IN SUPPLEMENTING INDUSTRIAL DISABILITY LEAVE BENEFITS? <input type="checkbox"/> YES <input type="checkbox"/> NO	
14A. EMPLOYMENT STATUS CONT. (Check current status of employment, not status at time of injury.) <input type="checkbox"/> UNEMPLOYED <input type="checkbox"/> ON STRIKE <input type="checkbox"/> DISABLED <input type="checkbox"/> RETIRED <input type="checkbox"/> LAID OFF <input type="checkbox"/> OTHER				
Completed by (type or print)		Signature	Title	Date
SCIF 3067 (REV. 2-93) <b>FILING OF THIS REPORT IS NOT AN ADMISSION OF LIABILITY. A CLAIM FORM MUST BE GIVEN TO THE INJURED WORKER WITHIN ONE WORKING DAY OF YOUR KNOWLEDGE OF OCCUPATIONAL INJURY OR ILLNESS WHICH RESULTS IN LOST TIME OR MEDICAL TREATMENT.</b>				

THIS FORM IS NOT SHOWN FULL SIZE.

(Rev. 12-00)

JULY 1996

10-19

**ABSENCE AND ADDITIONAL TIME WORKED REPORT****Form STD. 634**

STATE OF CALIFORNIA <b>ABSENCE AND ADDITIONAL TIME WORKED REPORT</b> STD. 634 (REV 5-98)		PAY PERIOD		TIMEBASE	WWG	CBID																										
1. MONTH		YEAR	SEMI-MONTHLY STATUS ONLY	ALTERNATE WORKWEEK SCHEDULE																												
			<input type="checkbox"/> FIRST HALF <input type="checkbox"/> SECOND HALF	<input type="checkbox"/> 4/10/40	<input type="checkbox"/> 9/8/80																											
2. NAME (First Middle Last)			3. SOCIAL SECURITY NUMBER	4. POSITION NUMBER																												
<b>5. ABSENCE WITH PAY</b>																																
(S) <input type="checkbox"/> SICK LEAVE SELF	(B) <input type="checkbox"/> BEREAVEMENT LEAVE	(C) <input type="checkbox"/> CATASTROPHIC LEAVE DONATIONS RECEIVED AND USED	(J) <input type="checkbox"/> JURY DUTY (Make copy for Accounting)																													
(SF) <input type="checkbox"/> SICK LEAVE FAMILY ILLNESS	(TO) <input type="checkbox"/> USING OVERTIME CREDITS	(M) <input type="checkbox"/> SHORT-TERM MILITARY LEAVE (Calendar Days) (Attach Military Duty Orders)	(SW) <input type="checkbox"/> SUBPOENAED WITNESS																													
(SD) <input type="checkbox"/> SICK LEAVE DEATH IN FAMILY (RELATIONSHIP)	(TH) <input type="checkbox"/> USING HOLIDAY CREDITS	(NDI) <input type="checkbox"/> NONINDUSTRIAL INJURY (Report of Industrial Injury must be submitted)	<input type="checkbox"/> PARTY <input type="checkbox"/> EXPERT																													
	(TE) <input type="checkbox"/> USING EXCESS HOURS CREDIT	(TD) <input type="checkbox"/> TEMPORARY DISABILITY	COURT CITY																													
(PL) <input type="checkbox"/> PERSONAL LEAVE	(PH) <input type="checkbox"/> USING PERSONAL HOLIDAY	(IDL) <input type="checkbox"/> INDUSTRIAL DISABILITY LEAVE	<input type="checkbox"/> NO FEES RECEIVED <input type="checkbox"/> FEES TO BE REMITTED TO STATE																													
(AL) <input type="checkbox"/> ANNUAL LEAVE	(SH) <input type="checkbox"/> USING SATURDAY HOLIDAY	(IDL/S) <input type="checkbox"/> INDUSTRIAL DISABILITY LEAVE WITH SUPPLEMENTATION	<input type="checkbox"/> FEES RETAINED																													
(V) <input type="checkbox"/> VACATION	(E) <input type="checkbox"/> PAID EDUCATIONAL LEAVE	OTHER	CHARGE ABSENCE TO																													
			<input type="checkbox"/> VAC <input type="checkbox"/> CTO <input type="checkbox"/> ABSENCE WITHOUT PAY																													
<b>6. ABSENCE WITHOUT PAY</b>																																
(L) <input type="checkbox"/> INFORMAL LEAVE GRANTED (11 Working days or less)	(A) <input type="checkbox"/> ABSENCE WITHOUT LEAVE (AWOL) (19996.2 OR 19672)	<input type="checkbox"/> ABSENCE WHILE ON PROBATION	(ML) <input type="checkbox"/> MENTORING LEAVE	<input type="checkbox"/> QUALIFYING																												
(L) <input type="checkbox"/> INFORMAL LEAVE GRANTED (15 Working days or less) (CSUC)	<input type="checkbox"/> TEMPORARY LEAVE (30 Calendar days or less)		(FM) <input type="checkbox"/> FAMILY AND MEDICAL LEAVE ACT (FMLA)	<input type="checkbox"/> NONQUALIFYING																												
<b>7. DATES OF ABSENCES AND EXTRA TIME WORKED</b> (Enter symbol and number of hours in date blocks. See reverse for legends and symbols not noted above. If the absence is for a compensable injury waiting period, add X to other symbol.)																																
REPORTING	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
7a. HRLY INT/PTY HRS TO BE PAID																																
7b. SICK																																
7c. BEREAVEMENT																																
7d. VACATION																																
7e. A/L																																
7f. TO, TH, TE, FR, PH, SH, E, M, SW, J, PL, ML																																
7g. L, A																																
7h. STRAIGHT TIME, WO, P, HC, WE																																
7i. PREMIUM TIME WO, P																																
8. REASON FOR ABSENCE OR EXTRA HOURS WORKED <input type="checkbox"/> MEDICAL APPOINTMENT <input type="checkbox"/> DENTAL APPOINTMENT																																
9. CERTIFICATE BY EMPLOYEE To the best of my knowledge and belief, the facts stated are accurate and in full compliance with legal requirements.																																
EMPLOYEE SIGNATURE _____ DATE _____																																
10. RECOMMENDATION AND SUBSTANTIATION OF SUPERVISOR																																
<input type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> APPROVAL NOT RECOMMENDED																																
SUBSTANTIATION SHALL BE REQUIRED FOR SICK LEAVE OF MORE THAN TWO CONSECUTIVE WORK DAYS. SHOW METHOD OF VERIFICATION BELOW.																																
SIGNATURE OF SUPERVISOR _____ DATE _____																																
11. STATEMENT BY PHYSICIAN (Not to be completed by attending physician for industrial illness or injury.)																																
<input type="checkbox"/> DOCTOR STATEMENT ATTACHED																																
<input type="checkbox"/> AS PHYSICIAN, I EXAMINED AND TREATED OR PRESCRIBED FOR THIS PATIENT ON THESE DATES																																
DATE OF RETURN TO WORK _____ IF STILL DISABLED, GIVE ESTIMATED DATE OF RETURN TO WORK _____																																
THE ILLNESS OR INJURY CAUSING THE DISABILITY WAS _____																																
SIGNATURE OF ATTENDING PHYSICIAN _____ DATE _____																																
12. PERIOD ON DISABILITY COMPENSATION FROM _____ TO _____																																
13. DISABILITY COMPENSATION SUPPLEMENT																																
HOURS SICK LEAVE VACATION CTO HOLIDAY CREDIT																																
14. OFFICIAL DEPARTMENTAL ACTION <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED																																
REVIEWED BY _____																																

THIS FORM IS NOT SHOWN FULL SIZE.

## REPORTING INJURIES AND ILLNESSES

JULY 1996

10-20

**DATA INPUT FOR PERSONAL INJURY ACCIDENT****Form PM-S-0067**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**DATA INPUT FOR PERSONAL INJURY ACCIDENT**  
PM-S-0067 (REV. 1/93)

Page 1 of 2 Front

**CONFIDENTIAL**

*This document contains personal information and pursuant to Civil Code 1798.21 it shall be kept confidential in order to protect against unauthorized disclosure.*

**ACCIDENT INFORMATION** (THIS FORM TO BE COMPLETED BY FIRST-LINE SUPERVISOR AND CHECKED BY THE SAFETY OFFICER)

DATE OF ACCIDENT	TIME (24 HOUR)	OTHER CALTRANS EMPLOYEE INJURED?	<input type="checkbox"/> YES <input type="checkbox"/> NO	ACCIDENT NUMBER <b>P -</b>
		CALTRANS VEHICLE(S) INVOLVED?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
ACCIDENT DESCRIPTION				

**EMPLOYEE INFORMATION**

LAST NAME		FIRST NAME		M.I.	SEX	DATE OF HIRE
SOCIAL SECURITY NUMBER		BIRTH DATE	DRIVER'S LICENSE NUMBER		DRUG TEST (SENSITIVE POSITIONS ONLY) <input type="checkbox"/> Yes <input type="checkbox"/> No	
CLASS-CODE	MAINTENANCE ACTIVITY NUMBER	EMPLOYMENT STATUS(CHECK ONE) <input type="checkbox"/> PFT <input type="checkbox"/> PI <input type="checkbox"/> LT <input type="checkbox"/> PPT <input type="checkbox"/> TAU <input type="checkbox"/> SPP <input type="checkbox"/> RA <input type="checkbox"/> SA <input type="checkbox"/> CE**				
DISTRICT NUMBER	UNIT/COST CENTER*	LOST TIME (DAYS)	MODIFIED WORK (DAYS)	SCIF CLAIM NUMBER		

**DETAILED INFORMATION**

Circle the appropriate entry

**A. TREATMENT STATUS**

- 01 CAL-QSHA  
02 FIRST AID  
03 NOT CLEARLY JOB RELATED  
04 EXPOSURE ONLY

**B. FATAL** IF YES, ENTER DATE OF DEATH

- 01 YES  
02 NO

**C. PERSONAL PROTECTIVE EQUIPMENT**

- 01 YES  
02 NO

**D. PREVENTABILITY BY EMPLOYEE**

- 01 YES  
02 NO  
03 INJURY CLEARLY THE FAULT OF ANOTHER CALTRANS EMPLOYEE  
04 INJURY CLEARLY THE FAULT OF ANOTHER PARTY

IF 03 ENTER THE SSN OF THE CALTRANS EMPLOYEE:

-----

**E. LOCATION OF ACCIDENT**

- 01 CAFETERIA/RESTAURANT  
02 CITY STREET  
03 CONSTRUCTION SITE  
04 CREW'S QUARTERS  
05 ELEVATOR  
06 EQUIPMENT BAY  
07 FREEWAY/HIGHWAY  
08 FREEWAY RAMP  
09 FREEWAY LANE CLOSURE  
10 HWY STRUCTURE/BRIDGE  
11 LABORATORY  
12 MAINTENANCE YARD  
13 MOVING LANE CLOSURE  
14 OFFICE BUILDING  
15 PARKING LOT  
16 REST AREA  
17 RESIDENCE  
18 SHOULDER CLOSURE  
19 SHOP/WAREHOUSE  
20 SIDEWALK  
21 STAIRWAY  
22 STREET/HWY LANE CLOSURE  
23 TUNNEL/TUBE  
24 COMMON CARRIER

**F. WEATHER/ENVIRONMENT**

- 01 CLEAR  
02 FOG  
03 RAIN  
04 SNOW  
05 CLOUDY  
06 WINDY  
07 POOR LIGHTING  
08 ADEQUATE LIGHTING  
09 N/A

**G. VISIBILITY**

- 01 OVER 1/2 MILE  
02 LESS THAN 1/2 MILE  
03 LESS THAN 100 YARDS  
04 N/A

**H. ACTIVITY TYPE**

- 01 BENDING  
02 BURNING  
03 CARRYING  
04 CLIMBING  
05 CRAWLING  
06 DIVING  
07 DRIVING  
08 FLAGGING  
09 GARDENING  
10 HAMMERING  
11 INSPECTING  
12 JUMPING  
13 LIFTING  
14 ENTER/LEAVE VEHICLE  
15 OFFICE WORK  
16 PAINTING  
17 PULLING  
18 PUSHING  
19 REACHING  
20 RIDING  
21 RUNNING  
22 SHOVELING  
23 SITTING  
24 STANDING  
25 STOOPING  
26 USING BENCH TOOL  
27 USING HAND TOOL  
28 USING SHOP MACHINERY  
29 WALKING  
30 UNAUTHORIZED ACTIVITY  
31 ASSIGNED DUTIES  
32 ALTERCATION W/CO-WORKER  
33 ALTERCATION W/SUPERVISOR  
34 ADVERSE ACTION  
35 USING PORTABLE POWER TOOL

**I. ACCIDENT TYPE**

- 01 ANIMAL/INSECT BITE/STING  
02 CAUGHT IN MACHINERY  
03 CAUGHT IN NON-MACHINERY  
04 CHEMICAL EXPOSURE  
05 CONTACT WITH ELECTRIC CURRENT  
06 CONTACT WITH FIRE/FLAME  
07 CONTACT WITH HOT OBJECT  
08 CONTACT WITH POISONOUS PLANTS  
09 CONTACT WITH SHARP OBJECT  
10 EXPOSURE TO HIGH TEMPERATURE

**L. ACCIDENT TYPE, CONTINUED**

- 11 EXPOSURE TO LOW TEMPERATURE  
12 EXPOSURE TO LOUD NOISE  
13 EXPOSURE TO SUN  
14 FALL FROM LADDER/STEPS  
15 FALL FROM SPILLED LIQUID  
16 FOREIGN OBJECT IN EYE  
17 MOTOR VEHICLE COLLISION  
18 RADIATION EXPOSURE  
19 BODY MOTION/REPETITIVE  
20 STRESS  
21 STRUCK BY OBJECT  
22 STRUCK BY MOTOR VEHICLE  
23 TRIP/SKID/FALL  
24 EXPOSURE TO DUST  
25 EXPOSURE TO GASES/FUMES  
26 BODY MOTION/SINGLE EVENT  
27 EXPOSURE TO BLOOD  
28 EXPOSURE TO INFECTIOUS MATL  
29 EXPOSURE TO WIRING  
30 EXPOSURE TO HAZARDOUS MATLS

**J. PART OF BODY**

- 01 ABDOMEN  
02 ANKLE  
03 ARM  
04 BACK/LOWER  
05 BACK/UPPER  
06 BUTTOCK  
07 CALF  
08 CHEST  
09 CIRCULATORY SYSTEM  
10 EAR/HEARING  
11 ELBOW  
12 PSYCHOLOGICAL  
13 EYES/VISION  
14 FACE  
15 FINGER  
16 FOOT  
17 FOREARM  
18 GENITALS  
19 GROINS  
20 HAND  
21 HEAD  
22 HEART  
23 HIP  
24 INTERNAL ORGAN  
25 KNEE/LOWER LEG  
26 MOUTH/TEETH  
27 NECK  
28 NERVOUS SYSTEM  
29 NOSE  
30 RESPIRATORY SYSTEM  
31 RIB

**K. PART OF BODY, CONTINUED**

- 32 SHOULDER  
33 SPINE  
34 THIGH  
35 THROAT  
36 TOE  
37 WHOLE BODY  
38 WRIST  
39 MULTIPLE (SEE REVERSE)  
**K. NATURE OF INJURY**  
01 ABRASION  
02 AMPUTATION  
03 BITE/STING  
04 BRUISE  
05 BURN/SCALD  
06 CANCER  
07 CONCUSSION  
08 CRUSH/PINCH  
09 CUMUL. TRAUMA/PHYSICAL  
10 CUT/PUNCTURE  
11 DEATH BY ILLNESS  
12 DEATH BY INJURY  
13 DERMATITIS  
14 DISLOCATION  
15 EMOTIONAL STRESS/SPECIFIC INC.  
16 BONE FRACTURE  
17 HEARING LOSS  
18 HERNIA  
19 IRRITATION  
20 NEUROLOGICAL  
21 INFECTIOUS DISEASE  
22 OVER EXERTION  
23 SORENESS  
24 PNEUMONIA  
25 POISONING  
26 SPRAIN  
27 SPLINTER  
28 STRAIN  
29 TORN MUSCLE  
30 STROKE  
31 INHALATION  
32 CUMUL. TRAUMA/PSYCHOLOGICAL  
33 MULTIPLE (SEE REVERSE)  
34 UNDETERMINED  
**S. OCCUPATION**  
01 ADM - ALL OFFICE WORK  
02 LAB - LAB TESTING, FIELD AND LAB  
03 SHP - MECHANICS, WELDERS, ETC.  
04 CON - FIELD CONSTRUCTION  
05 SUR - FIELD SURVEYS  
06 FTR - FIELD TRAFFIC  
07 TOL - TOLL SERVICES  
08 FMT - FIELD MAINTENANCE  
09 SPP - SPECIAL PROGRAM PEOPLE  
10 CEM - CONTRACTORS EMPLOYEE\*\*

☐ CERTIFIED CORRECT; O.K. FOR DATA ENTRY

Safety Officer's signature

\* ENTER THE UNIT NUMBER THE EMPLOYEE WAS CHARGED TO AT THE TIME OF THE ACCIDENT

\*\* INCLUDED FOR TRACKING PURPOSES ONLY

FM 2238 M 95

JULY 1996

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**MODIFIED WORK ASSIGNMENT AGREEMENT****Form PM-S-0004**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**MODIFIED WORK ASSIGNMENT AGREEMENT**  
 PM-S-0004 (REV. 03/2000)

**CONFIDENTIAL**

This document contains personal information and pursuant to Civil Code 1798.21 it shall be kept confidential in order to protect against unauthorized disclosure.

☐ **WORK RELATED INJURY/ILLNESS**
☐ **NON-WORK RELATED INJURY/ILLNESS**

EMPLOYEE NAME

DATE OF INJURY/ILLNESS

SUPERVISOR NAME

BUSINESS PHONE

WORK UNIT/COST CENTER

NATURE OF INJURY OR ILLNESS

DESCRIPTION OF LIMITATIONS PREVENTING RETURN TO FULL DUTY (ATTACH MEDICAL SUBSTANTIATION)

Sample

DESCRIPTION OF MODIFIED WORK ASSIGNMENT (DESCRIBE DUTIES TO BE PERFORMED)

NAME OF PHYSICIAN APPROVING RELEASE TO MODIFIED WORK

DATE MODIFIED WORK ASSIGNMENT TO BEGIN

DATE MODIFIED WORK ASSIGNMENT TO END

A MODIFIED WORK ASSIGNMENT IS **TEMPORARY** WORK INTENDED TO BE A TRANSITION PERIOD FOR RETURNING AN INJURED OR ILL EMPLOYEE TO HIS/HER POSITION WITHOUT LOSS OF PAY. **MAXIMUM DURATION OF A MODIFIED WORK ASSIGNMENT IS 90 CALENDAR DAYS**, UNLESS APPROVED FOR EXTENSION BY THE SUPERVISOR AND DISTRICT SAFETY OFFICER OR CASE MANAGER AS APPROPRIATE. EXTENSIONS MUST BE SUBSTANTIATED BY MEDICAL DOCUMENTATION. (ATTACH INFORMATION)

**WE HAVE READ, FULLY UNDERSTAND, AND AGREE TO THE DUTIES DESCRIBED IN THE MODIFIED WORK ASSIGNMENT AGREEMENT.**

EMPLOYEE'S SIGNATURE

SUPERVISOR'S SIGNATURE

DATE OF SIGNATURE

DATE OF SIGNATURE

DISTRIBUTION - MAKE COPIES AND DISTRIBUTE TO:

**FOR WORK RELATED:**

1. ORIGINAL TO DISTRICT SAFETY OFFICE OR WORKER'S COMPENSATION CASE MANAGEMENT UNIT
2. ONE COPY TO SUPERVISOR
3. ONE COPY TO EMPLOYEE

**FOR NON-WORK RELATED:**

1. ORIGINAL TO SUPERVISOR
2. ONE COPY TO EMPLOYEE

## REPORTING INJURIES AND ILLNESSES

JULY 1996

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### **REPORTING INJURIES AND ILLNESSES**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 11

## **CODES OF SAFE WORK PRACTICES**

### **GUIDELINES FOR DEVELOPING AND WRITING CODES OF SAFE WORK PRACTICES**

#### **TABLE OF CONTENTS**

11.00	INTRODUCTION
11.01	PURPOSE
11.02	POLICY STATEMENT
11.03	DEFINITION OF A HAZARDOUS CONDITION(S)
11.04	WRITING CODES OF SAFE WORK PRACTICES
11.05	SAMPLES CODES OF SAFE WORK PRACTICES

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**CODES OF SAFE WORK PRACTICES**

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# CHAPTER 11

## **CODES OF SAFE WORK PRACTICES**

### **GUIDELINES FOR DEVELOPING AND WRITING CODES OF SAFE WORK PRACTICES**

#### **11.00 INTRODUCTION**

This chapter focuses attention on promoting and maintaining safe work practices through the use of written procedures to identify and control potential physical and/or environmental hazardous conditions in the workplace.

#### **11.01 PURPOSE**

The purpose of this chapter is to heighten supervisors understanding the nature of potential physical and/or environmental hazardous conditions by reviewing work activities and equipment operations, and then develop step-by-step procedures that will identify and control the hazardous conditions to help reduce injuries and illnesses in the workplace.

This chapter is for supervisors and employees who work in office settings. It is expected that supervisors will use the ideas presented in this chapter as a guide in developing written Codes of Safe Work Practices that identify and control hazardous conditions unique to their operations.

Field operations; such as Maintenance, Construction, Surveys, Structures, have written safe work practices known as “Codes of Safe Operating Practices.”

To distinguish between field and office work, this chapter uses the reference “Code of Safe Work Practices” for office work settings.

#### **11.02 POLICY STATEMENT**

Supervisors shall review all work activities and operations to identify and control potential physical and/or environmental hazards and evaluate the need to develop Codes of Safe Work Practices.



**11.03 DEFINITION OF A HAZARDOUS CONDITION(S)**

A hazard is any existing or potential condition in the workplace which, by its self or by interacting with other variables, can result in the unwanted effects of injuries, property damage, and other losses.

This definition carries with it two significant points:

- A hazardous condition does not have to exist at all times to be classified as a hazard when the situation is being evaluated.
- A hazardous condition may not result from independent failure of workplace components but from one workplace component acting upon or influencing another.

In any work activity, workers, equipment, and materials interact within the work environment to produce a product or perform a service. Reviewing this interaction can produce easy-to-follow Codes of Safe Work Practices to help reduce injuries and illnesses in the workplace.

**11.04 WRITING CODES OF SAFE WORK PRACTICES**

Codes of Safe Work Practices may be developed for any work activity or operation, or to cover a work activity involving several employees or a task requiring only a single person. For example, codes can be written to cover the maintenance and repair of office copy machines, working around paper cutters, preparing for a field trip, inspecting a bridge deck, or operating a CADD machine.

A "CODE OF SAFE WORK PRACTICES" is developed and written to provide the following:

- 1) a list of potential physical and/or environmental hazards associated with a work activity or operation, and
- 2) a list of specific instructions that identify various operating procedures, reference materials, and equipment required to avoid injuries and illnesses.

Supervisors may consider having employees sign and date a Code of Safe Work Practices to ensure that they have read and understand the purpose, content, and scope of a particular code.

**11.05 SAMPLES CODES OF SAFE WORK PRACTICES**

The following pages illustrate three (3) sample Codes of Safe Work Practices covering routine activities found in most work environments. As may be observed, the content, purpose, and scope of each example is easy to follow. By analyzing these examples, most persons can be creative enough to develop a code of safe work practices for any activity encountered.

Supervisors are encouraged to review and evaluate work procedures and/or operations, analyze and write Codes of Safe Work Practices for their offices and/or unique work activities.

The suggested format shown at the end of this chapter may be changed to fit local needs. What is essential is that all of the required elements be included.

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**CODES OF SAFE WORK PRACTICES**

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**CODE OF SAFE WORK PRACTICES****GENERAL OFFICE****OFFICE WORK ENVIRONMENT****PHYSICAL AND ENVIRONMENTAL HAZARDS****TYPICAL OFFICE HAZARDS:**

1. Trip, slip, and fall hazards;
2. Work areas not kept clean and clear;
3. Electrical cords not secure;
4. Overcrowding of employees;
5. Doors and aisles not kept clear;
6. File drawers open;
7. Appliances such as coffee pots, microwave ovens, and fans on a single electrical circuit;
8. Bending, stooping, and lifting heavy objects; and/or
9. Office equipment/furniture not laid out for efficiency or convenience.

**SAFE WORK PRACTICES****TYPICAL PRECAUTIONS TO AVOID INJURY:**

1. Report unsafe conditions to supervisor;
2. Store materials and supplies in a safe and orderly manner;
3. Place trash and refuse in proper containers;
4. Wipe up spills promptly;
5. Never leave file or desk drawers open;
6. Use proper lifting and bending techniques;
7. Electrical cords must be plugged into appropriate wall receptacles;
8. Fans and portable heaters must have hand guards;
9. Electrical cords must not show signs of wear, heat, or fraying;
10. All electrical extension cords must be three-prong, grounded cords;
11. Know the locations of fire extinguishers; and
12. Maintain first aid supplies.

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**CODES OF SAFE WORK PRACTICES**

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CODE OF SAFE WORK PRACTICES

**COPY MACHINE**

PAPER REPLACEMENT

**PHYSICAL AND ENVIRONMENTAL HAZARDS**

TYPICAL HAZARDS OF ADDING PAPER TO A COPY MACHINE:

1. Slip, trip, and fall hazard;
2. Paper cuts;
3. Bending, stooping, and lifting heavy objects;
4. Overcrowding of employees;
5. Moving machine parts; and
6. Exposure to sharp edges, and hidden obstructions;

**SAFE WORK PRACTICES**

TYPICAL PRECAUTIONS TO AVOID INJURY:

1. Be familiar with manufacturer's instructions;
2. Turn-off electrical power, if necessary;
3. Open doors slowly;
4. Watch for other employees;
5. Open paper trays;
6. Open paper wrapping carefully to avoid paper cut;
7. Bend, stoop, and lift properly;
8. Place paper in machine tray carefully;
9. Close machine doors; and
10. Clean up debris as necessary.

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**CODES OF SAFE WORK PRACTICES**

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**CODE OF SAFE WORK PRACTICES****FIELD TRIP****PREPARING FOR A FIELD TRIP****PHYSICAL AND ENVIRONMENTAL HAZARDS****TYPICAL FIELD TRIP HAZARDS:**

1. Adverse weather conditions;
2. Slippery roadways;
3. Moving traffic/traffic congestion;
4. Hazardous parking areas;
5. Noise;
6. Impaired drivers;
7. Footing on uneven terrain;
8. Poor visibility;
9. Contact with flying particles; and
10. Bending, stooping, and lifting objects.

**SAFE WORK PRACTICES****TYPICAL PRECAUTIONS TO AVOID INJURY:**

1. Review Safety Manual for field work safety items;
2. Wear appropriate footwear, hard hat, safety glasses, and warning garments;
3. Wear appropriate personal clothing;
4. Perform pre-operation inspection on vehicle;
5. Bend, stoop, and lift properly;
6. Obey traffic laws;
7. Be alert for other motorists;
8. Stop and/or park vehicle in safe place;
9. Exit vehicle properly, away from traffic;
10. Avoid backing vehicle if possible;
11. Use physical protection from traffic where practicable, (a vehicle, guardrail, K-rail, etc.)
12. Work facing traffic and/or use lookout;
13. Wear hearing protection as required.



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**CODES OF SAFE WORK PRACTICES**

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# CHAPTER 12

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### PERSONAL SAFETY DEVICES AND SAFEGUARDS

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12.01	PURPOSE
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12.03	PERSONAL CLOTHING GUIDELINES
12.04	PERSONAL PROTECTIVE EQUIPMENT STANDARDS
12.05	HEAD PROTECTION - HARD HATS
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12.14	EYE PROTECTION FOR CONTACT LENS WEARER'S

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

JULY 1996

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# CHAPTER 12

## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

### **PERSONAL SAFETY DEVICES AND SAFEGUARDS**

#### **12.00 INTRODUCTION**

The use of personal protective equipment is subject to several safety and health regulations contained in the Cal-OSHA General Industry Safety Orders (GISO), Construction Safety Orders (CSO), and/or the Electrical Safety Orders (ESO).

This chapter provides information about specific items and/or categories of personal protective equipment used to protect and shield employees from injury or illness.

#### **12.01 PURPOSE**

The purpose of this chapter is to provide detailed information about each type of personal protective equipment, and how it can protect each major body area; head, eyes and face, ear, respiratory, hands and arms, body and legs, and feet.

Every effort has been made to provide a reference to a specific GISO, CSO, and/or ESO section(s) applicable to the use and type of each item of personal protection equipment.

Unless stated otherwise, the Department provides all required personal protective equipment.

#### **12.02 POLICY STATEMENT**

Managers and supervisors are responsible to ensure that appropriate personal protective equipment is readily available to protect employees from exposure to physical or environmental hazards that may cause injury or illness.

#### **12.03 PERSONAL CLOTHING GUIDELINES**

Employees are expected to report to work reasonably dressed to protect themselves during routine assignments and from exposure to usual and/or predictable physical and environmental conditions found in the workplace.

Employees shall be given adequate advance notice of field trips so they may properly dress to protect themselves from exposure to the conditions in the new assignment. See Section 12.19, Body and Leg Protection, for more details.

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**12.04 PERSONAL PROTECTIVE EQUIPMENT STANDARDS**

Title 8 of the California Code of Regulations, also known as the Cal-OSHA Regulations, require employers to provide personal protective equipment. Section 3380, Personal Protective Devices of the General Industry Safety Orders (GISO), and Section 1514 of the Construction Safety Orders (CSO) require:

- That all safety devices and safeguards, that are required to be used by employees, are of the proper type for the expected exposure and of such design, strength, and quality as to eliminate, preclude, or mitigate the hazard.
- That personnel protective equipment shall be distinctly marked so as to facilitate identification of the manufacturer.
- That the supervisor shall assure that the employee is instructed and uses personnel protective equipment in accordance with the manufacturer's instruction.
- That employee-owned/visitor-owned personal protective equipment complies with standards and regulations prescribed by Cal-OSHA and Caltrans. Supervisors shall assure that this equipment is maintained in a safe, sanitary condition.
- That all safety devices and safeguards shall be of such design, fit, and durability as to provide adequate protection against the hazards for which they are designed.
- That safety devices and safeguards shall be reasonably comfortable and shall not unduly encumber the employee's movements necessary to perform his/her work.

Supervisors are responsible to ensure that employees are given appropriate personal protective equipment wherever they may be exposed to hazardous conditions that can cause injury or illness.

**American National Standard Institute (ANSI)**

All Caltrans personal protective equipment that requires special identification shall be clearly identified with the appropriate American National Standard Institute (ANSI) logo, specification numbers, and/or manufacturers mark, label, tag, initial, monogram, serial number, or other applicable identification.

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Employees are personally responsible to use good judgement and wear personal protective equipment as directed, or whenever they are involved in a work activity where they can reasonably be expected to be exposed to a hazard, or where a hazard may cause injury or illness.

When employees are issued equipment for the first time or when new devices are introduced, the supervisors will provide training as to how and why the equipment must be used.

Supervisors should allow employees to try out new personnel protective equipment and/or new devices prior to actual use. Employees should offer their comments and discuss the equipment before the work begins.

\* \* \* \* \*

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**12.05 HEAD PROTECTION - HARD HATS**

Section 3381, Head Protection of the General Industry Safety Orders (GISO), and Section 1515, Head Protection of the Construction Safety Orders (CSO) require:

- Employees exposed to falling or flying objects, or hazardous chemical substances, and/or electrical shock and burns shall wear a hard hat for head protection.
- Hard hats shall meet the applicable requirements and specifications established by the American National Standards Institute (ANSI), as follows:

NOTE 1. GISO 3381(b)(1), CSO 1515(a)(2) For exposure to flying or falling objects, or electric shock/burns (600 volts or less) hard hats purchased after January 12, 1995, shall comply with ANSI Z89.1 1986, Class A or Class B, or if purchased before January 12, 1995, shall comply with ANSI Z89.1-1969, Class A. This applies to all work activities, except Electrical and Tree Maintenance work activities. See Note 2. below.

NOTE 2. GISO 3381(c), CSO 1515(a)(3)(4) For exposure to flying or falling objects, and high voltage electric shock (above 600 volts) shall comply with ANSI Z89.2 1971, Class B, or if purchased after December 4, 1992, shall comply with ANSI Z89.1-1981, Class B. This applies to all work activities, and Electrical and Tree Maintenance work activities. See Note 1. above.

**12.05-1 HARD HATS - DESIGN FEATURES**

The Department authorizes the use of two (2) hard hat designs; the traditional and the western cowboy-style.

- The Department provides only the traditional style-hard hats. (Cap style with front brim, or hat style with wide brim all around.)
- The Department does not provide the western cowboy-style hard hat. Employees are authorized to wear the western cowboy-style hard hat, but must purchase their own.

**12.05-2 HARD HATS - PROHIBITED USE:**

- Employees engaged in Electrical and Tree Maintenance work activities are prohibited from wearing the western (cowboy) style-hard hat.
- Metal hard hats are prohibited.

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**12.06 HARD HATS - WHEN TO WEAR**

Employees are responsible to wear hard hats during any work activity that may expose them to a head injury. Some of the most common work activities requiring hard hats are:

- When employees are exposed to falling or flying objects, or hazardous chemical substances, and/or electrical shock and burns.
- Whenever an employee is working on-foot within the right-of-way of any highway or road, which includes freeways, multi-lane highways, and city streets.
- When employees are working on-foot during any work activity where motorized equipment or motor vehicles are being used.
- While operating any motorized equipment not equipped with an “enclosed cab.”

NOTE: Enclosed Cab.

1. An “enclosed cab” is defined as motorized equipment with a windshield, doors, and surrounding cab protection with metal components and window glass.
2. Motorized equipment with a covered operator area or roll over protection only is not consider an “enclosed cab.”
3. Hard hats may be removed by the operator while driving a motor vehicle or motorized equipment which has an “enclosed cab”, but the operator shall put on their hard hat when exiting the vehicle or equipment and before beginning any on-foot work activity where hard hats are required.

NOTE: Proper Fit and Protection.

The hard hat suspension shall be correctly adjusted to ensure a proper and secure fit. chin straps shall be required as work conditions warrant. Supervisors are also responsible to ensure the style of the hard hat is properly suited for the assigned work. For example, if the hard hat restricts an employee’s ability to safely perform their work, or exposes an employee to an unsafe working condition, the supervisor shall direct the employee to wear hard hat protection that is suitable to the assigned work.



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**12.07 HARD HAT COLOR CODE RECOGNITION**

The following colors have been adopted for official use to distinguish different work activities within Caltrans.

- White colored hard hat with the traditional Caltrans "CT" logo is the designated hard hat for most Caltrans employees and is used in most work settings.
- Yellow colored hard hat is the accepted standard color for electrical work crews.
- White colored hard hat **without** the traditional Caltrans "CT" logo is used by the "Adopt-A-Highway-Program" participants. The Adopt-A-Highway logo may be embossed on the hard hats.
- Orange colored hard hats have been adopted for use by the "Special Program People" performing litter pickup.

**12.08 HARD HAT AUTHORIZED DECALS**

Employees should have the traditional Caltrans "CT" logo decal on their hard hat.

Employees may also have a First Aid certification decal and an Accident Free (xx) Years decal affixed to their hard hats. The employee's name and reflective tape may also be applied to hard hats.

Employees shall not place or affix any other decals, tags, stickers, monograms, badges, or similar items on their hard hats without supervisory approval.

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**12.09 EYE AND FACE PROTECTION**

Section 3382, Eye and Face Protection of the General Industry Safety Orders (GISO), and Section 1516 of the Construction Safety Orders (CSO) require:

- Employees who work where there is a risk of receiving face and eye injuries such as punctures, abrasions, burns or contusions as a result of contact with flying particles, hazardous substances, projections, pesticides, or light rays in connection with welding operations shall be protected with appropriate face and eye protection.

NOTE:

*Appropriate face and eye protection means using safety glasses, goggles, or face shields suitable for the expected hazard.*

- Suitable screens or shields isolating the hazardous exposure from welding operations to nearby employees shall be used.
- Where exposed to injurious light rays, from arc welding or cutting, the shade of lens shall be selected in accordance with Table EP- 1 in GISO Section 3382. Copies of the table are available from the Safety Office. See Section 12.15, Eye Protection for Welding Operations, for details.
- If an employee wears prescription eye glasses, suitable safety glasses or goggles shall be provided.

**American National Standard Institute (ANSI)**

Eye and face protection shall be clearly identified with the appropriate American National Standard Institute logo.

If purchased before January 12, 1995 it shall have the (ANSI) Z87.1-1968 logo.

If purchased after January 12, 1995 it shall have the (ANSI) Z87.1-1989 logo.

**12.10 WHEN TO WEAR EYE PROTECTION**

Employees are responsible to wear eye protection during any work activity that may expose them to eye injury.

The following examples illustrate some of the most common work activities where eye protection is required:

- Eye protection shall be worn whenever an employee is working on-foot within the right-of-way of any highway or road, which includes freeways, multi-lane highways, and city streets.
- Eye protection shall be worn by employees on-foot during any work activity where motorized equipment or motor vehicles are being used.
- Eye protection shall be worn by the operator (e.g., while driving) of any motorized equipment that is not equipped with an enclosure or cab.
- Eye protection may be removed by the operator while driving a motor vehicle or motorized equipment which has an enclosure or cab, but shall be put on when exiting the vehicle or equipment and before beginning any "on-foot" work activity.

Additional examples where eye protection is required:

- **Clear and Present Danger**

Eye protection shall be worn whenever there is a clear and present danger of falling or flying objects; e. g., chain saw operations, flagging traffic, operating lathes, or machinery with exposed moving parts (belts and pulleys), grinders, welding, etc.

- **Designated "Eye Protection Area"**

Where local conditions require wearing eye protection at all times such as maintenance stations located under bridge structures, equipment shops, welding operations, etc., that have been designated an "Eye Protection Area."

Employees who wear prescription eye glasses and are required to enter a work environment that will expose them to possible eye injury must wear safety glasses or goggles, suitable for the expected hazard, over their prescription eye glasses.

Supervisors in field assignments will maintain a sufficient number of safety glasses, goggles or face shields at the work site to accommodate the needs of their employees.

Supervisors in office settings should maintain a supply of eye protection devices at the work site if appropriate. Supervisors can order safety glasses, goggles, and face shields through the District or Headquarters Procurement Offices.

### **12.11 STATE-FURNISHED PRESCRIPTION SAFETY GLASSES**

Qualifying employees who wear prescription eye glasses shall be provided with at least two (2) pair of State-furnished safety glasses annually, if the employee's prescription changes. (Employee vision insurance plans usually provide for an annual eye examination.)

- **Who qualifies for State-furnished prescription safety glasses**

Employees who work in field locations qualify for State-furnished safety glasses.

Working in field locations means working in Maintenance, Construction, Equipment Shops, Surveys, Structures Construction, Structures Maintenance, or who regularly take field trips to similar work areas as part of the daily work assignment.

**Employees who are not assigned to field activities or do not regularly take field trips do not qualify for State-furnished prescription safety glasses.**

- **Who pays for the eye examination**

The cost of the eye examination is paid for by the employee, through the employee's vision insurance plan. The time required for the eye examination is charged to the employee's leave balances.

- **Ordering replacement broken, scratched, lost or damaged glasses**

Replacement lenses and/or frames will be paid for by the Department when there is a change in the prescription or the glasses are broken, scratched, or damaged during any work activity through no fault of the employee.

**NOTE:**

Supervisors do not have to order two (2) pair of glasses every time an employee breaks only one (1) pair of glasses. Glasses may be ordered one pair at a time. Additional orders shall not be made to circumvent the two pair per year limit.

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- **Prescription eye glasses for spraying pesticides**

Employees who wear prescription eye glasses and spray pesticides may be provided with one (1) additional pair of prescription safety glasses.

The glasses used for pesticide spraying are manufactured with specialized frames to provide front, brow, and temple protection in compliance with Title 3, Department of Food and Agriculture Pesticide Application Regulations.

Employees who wear prescription eye glasses and work as Hazmat spill response team members may be provided with one (1) pair of specialized lenses to be fitted inside their full facepiece respirator.

## **12.12 SPECIFIC DETAILS ABOUT ORDERING PRESCRIPTION SAFETY GLASSES**

- **An overview of what can be ordered**

Qualifying employee will be furnished with at least two (2) pairs of glasses, and may also qualify for a third pair of safety glasses.

The first two (2) pairs of prescription safety glasses are for employees who work in field locations, and can be ordered in any combination of clear, tinted, or photo-gray extra glass. One pair of the glasses must be clear or photo-gray extra.

The reason for issuing at least one (1) pair of safety glasses in either clear or photo-gray extra glass is to ensure that the employee will always have at least one pair of safety glasses available for either day or night work.

- **For pesticide spraying**

To comply with the requirements of Title 3, Department of Food and Agriculture Pesticide Application Regulations, one (1) pair of safety glasses must be ordered with specialized frames that provide front, brow, and temple protection.

This pair of the safety glasses must be ordered in clear or photo-gray extra to assure that the employee will always have a pair of safety glasses available for day work or night work.

- **For full facepiece respirator**

The specialized ground lenses for full facepiece respirator must be ordered in clear or photo-gray extra.

All prescription safety glasses must be ordered on the PRESCRIPTION SAFETY GLASSES/LOCAL REQUEST. The Purchasing Branch in the Administrative Service Center will process all orders through a Contract Delegation Purchase Order (CD/PO).

State-furnished safety glasses are manufactured and assembled by California Prison Industries (PIA). PIA is a division of the California Department of Corrections. Under existing law, all State agencies are required to order glasses for their employees through PIA.

PIA normally use eye glass frames that fit the average person, therefore, oversize or undersize frames and lenses sizes may require special ordering procedures. Employees or procurement personnel should contact their District or Headquarters Safety Office for assistance.

The employee's Vision Insurance Plan is used to pay for the eye examination. The doctors prescription is included in the Form 0205, and is sent to PIA where the lenses are fitted to PIA furnished frames.

Employees may select eyeglass frames from designated locations; i.e., Maintenance Regional Offices, District/Headquarters Warehouses, or other designated locations.

A sample of Form ADM 0205, PRESCRIPTION SAFETY GLASSES/LOCAL REQUEST, is included at the end of this chapter.

### **12.13 TEMPLE WIDTH OF GLASSES AND DRIVING RESTRICTIONS**

The California Vehicle Code, Section 23120, TEMPLE WIDTH OF GLASSES, states:

*"No person shall operate a motor vehicle while wearing glasses having a temple width of one-half inch or more if any part of such temple extends below the horizontal center of the lens so as to interfere with lateral vision."*

Safety glasses with side temple protectors, including those required to comply with the Title 3 pesticide spray regulations, which may violate this motor vehicle code section, shall not be worn while driving.

**12.14 EYE PROTECTION FOR CONTACT LENS WEARER'S**

Contact lenses do not provide eye protection. Employees who wear contact lenses should not enter a work environment where there is a risk of receiving eye injuries unless they wear eye protection.

- Contact lenses are prohibited when:
  - working with solvents, gases, mists, dust, and vapors;
  - performing automotive/equipment repairs;
  - working with storage batteries (replacement, charging, jumping, etc.);
  - welding (gas/arc);
  - working on machinery with moving parts; i.e., grinders, lathes;
  - working in trees, bushes, or shrubs; and/or
  - working with chemicals/pesticides.
- Contact lenses may be worn, but eye protection (glasses or goggles) must also be worn over the contact lens:
  - during any work in an environment that may cause injury to the eyes;
  - working along highways, freeways; and/or
  - working within a maintenance, construction, or similar work zone.

**12.15 EYE PROTECTION FOR WELDING OPERATIONS**

Proper helmets or goggles must be worn during welding, cutting, or brazing operations to prevent eye damage. It is critical that the correct tint or shade of protection is used. See the General Industry Safety Orders (GISO) section 3382, "Eye and Face Protection" for guidance.

The tinted glass in welding helmets and goggles is permanently marked to indicate the shade or tint and must be tempered and free from flaws. Do not use lenses that are not the correct shade or tint for the work. Generally, goggles or helmets for oxy-acetylene are not acceptable for electric arc welding/cutting. Makeshift devices such as painted lenses, combined lenses, sunglasses (unless specifically made for the work), etc., will not be used.

Inspect goggles and helmets before use, check lenses and body for cracks, pinholes, or other damage. Repair or replace before use. Helmets must protect the face, neck, and ears from direct radiant energy.

Suitable shields and screens or other methods shall be used to isolate welding/cutting operations from nearby employees.

**12.16 EMERGENCY EYEWASH AND SHOWER REQUIREMENTS**

Section 5162, “Emergency Eyewash and Shower Equipment” of the General Industry Safety Orders (GISO), requires that a plumbed or self-contained eyewash meeting sections 5,7 or 9 of ANSI Z358.1- 1981, be provided in all work areas where, during routine or foreseeable emergencies, the eyes of the employee may come into contact with a substance that is corrosive, a severe irritant, causes permanent tissue damage, or is toxic by absorption. If the substance can get on the skin or body, an emergency shower meeting ANSI Z358.1 – 1981 sections 4 or 9 is also required.

These ANSI requirements require a continuous water flow for at least 15 minutes. Water hoses, sink faucets, showers, etc. are not acceptable eyewash facilities. ANSI approved personal eyewash bottles and drench hoses can supplement approved eyewash facilities, but cannot be used instead of the required eyewash.

The eyewash or shower equipment shall be in accessible locations requiring no more than 10 seconds to reach. The area around the eyewash/shower shall be maintained free of all items that would obstruct their use. Plumbed eyewash and shower equipment shall be activated at least monthly to flush the lines and verify proper operation. This monthly inspection should be documented.

**12.17 EAR AND HEARING PROTECTION**

The General Industry Safety Orders (GISO), Sections 5095 through 5100, and Section 1521 of the Construction Safety Orders (CSO) require the Department to administer a hearing protection program for its employees.

Hearing protection shall be worn whenever the noise level is 90 decibels or more. If the employee is exposed to noise hazards exceeding 85 decibels over an 8-hour time weighted average he/she must be enrolled in the Department’s Hearing Conservation Program. For in depth information regarding this program consult Chapter 13.

Employees exposed to hazards affecting the ear, or noise levels that may cause hearing loss, must be provided with appropriate hearing protection. Supervisors shall:

- Ensure that employees receive training.
- Make available, as needed, a variety of suitable hearing protection equipment to employees.
- Request periodic safety inspections to monitor work operations and new equipment to identify potential exposure to noise levels that may equal or exceed the Cal-OSHA standard.



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Training shall cover the effects of noise on hearing, the various types of hearing protection devices, their care and use.

Hearing protection devices come in many forms. The most common are earplugs and ear muffs, as well as variations of each style.

Earplugs can be either reusable or disposable. Reusable earplugs will be cleaned thoroughly after each use with mild soap and water and stored in a clean protective container. Disposable earplugs are discarded after each use and should not be taken in and out frequently during their use. Reusing them may lead to infection.

Earmuffs provide attenuation of sound as well as some protection for the outer ear in particularly dirty situations. Muffs may be used along with earplugs in extremely noisy environments.

The District or Headquarters Office of Safety and Health can assist in arranging for testing of equipment, areas or processes to determine the need for hearing protection. As a general rule, if you can not hear normal conversation at a distance of two feet, the noise level is too high and hearing protection is needed.

## **12.18 HAND AND ARM PROTECTION**

Section 3384, Hand Protection of the General Industry Safety Orders (GISO), and Section 1520 of the Construction Safety Orders require:

- Employees who may be exposed to hazards to the hand such as cuts, burns, harmful physical or chemical agents which are capable of causing injury or impairments shall be provided with hand protection.
- Hand protection, such as gloves, shall not be worn where there is a danger of the hand protection becoming entangled in moving machinery or materials.

Glove selection shall be based upon what is best suited for the expected hazard, and selection should include such things as thickness, or gauge of the material, which directly affects the employee's dexterity, tactility, and hand fatigue. Select heavier gloves for durability and greater protection in jobs where heavy or sharp objects will be handled.

Gloves used for handling toxic chemicals must comply with the requirements described in the Material Safety Data Sheet (MSDS) and the label for the particular product being handled.

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Employees exposed to caustic or toxic chemicals, flying objects, abrasives, or sparks should wear long sleeve shirts which protect their hands and arms from injury.

Sleeveless shirts and garments that expose bare shoulders or bare arms do not provide adequate protection against most physical and environmental hazards and are not acceptable.

Employees should not wear loose sleeves, tails, ties, lapels, cuffs, or other loose clothing around moving machinery or other locations which can expose them to injury.

Supervisors are expected to require employees to wear clothing that is appropriate for the job assignment and protects the employee from work site hazards.

### **12.19 BODY AND LEG PROTECTION (Back Belts and Chainsaw Leg Protection)**

Section 3383, Body Protection of the General Industry Safety Orders (GISO), and Section 1522 of the Construction Safety Orders require:

- Employees shall be provided with appropriate body protection whenever their work exposes parts of their body, not otherwise protected, to hazardous or flying substances or objects.
- Employees shall wear clothing appropriate for the work being done. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can be entangled in moving machinery shall not be worn.
- Clothing saturated or impregnated with flammable liquids, corrosive substances, irritants or oxidizing agents shall be removed and shall not be worn until properly cleaned.

In addition to Cal-OSHA requirements listed above, the following body and leg protection guidelines shall be followed:

- **Personal Clothing Must Protect the Body and Legs**

Employees are responsible to report to work adequately dressed to protect themselves from routine physical and environmental hazards found in the workplace.

Personal clothing should provide protection from such things as sunburn, poison oak, insect bites, vegetation, and/or chemicals.

Garments that expose upper body parts (midriff) and bare legs; e.g., shorts and cutoff pants do not provide adequate protection against most physical and environmental hazards. Supervisors are expected to require employees to wear clothing that is appropriate for the job assignment and protects the employee from work site hazards.

Employees exposed to caustic or toxic chemicals, hot materials, splashing or flying materials, abrasives, corrosives, and/or sparks shall not be allowed to wear short pants or other personal apparel which increase their exposure to injury.

- **Back Belts (lumbar support)**

NOTE:

It is Departmental policy that back belts shall not be purchased as personal protective equipment unless prescribed by a physician.

The National Institute for Occupational Safety and Health (NIOSH) does not recommend the use of back belts to prevent injuries among uninjured workers, and does not consider back belts to be personal protective equipment.

The most effective means of minimizing the possibility of back injury is through training on proper lifting techniques.

Back belts may be purchased only for employees who have a doctor's prescription specifically indicating that the employee should use a back belt for specific work activities. Medical prescriptions will usually refer to back belts and similar devices as "lumbar support".

Procurement personnel should not process requests for back belts unless approved by the Headquarters Safety and Health Officer.

See Chapter 7 - ERGONOMICS for more details.

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- Leg Protection (Chain Saw CHAPS)

Chain saw leg protection shall be worn by all chain saw operators while working on the ground. Use of chain saw leg protection for employees working above ground level is optional. Supervisors shall determine when this option will be applied.

All chain saw operators shall successfully complete the "Chain Saw Training" program and be properly certified.

### **12.20 WARNING GARMENTS: VEST, JACKETS, SHIRTS, AND COVERALLS**

Section 1598(c) and (d) TRAFFIC CONTROL FOR PUBLIC STREETS AND HIGHWAYS, and Section 1599(d) and (e) FLAGGERS, of the Construction Safety Orders (CSO) requires:

Employees, and flaggers, shall be clearly visible to approaching traffic at all times. While working on foot and exposed to the hazards of vehicular or equipment traffic, they shall wear orange, strong yellow-green, or fluorescent versions of these colored warning garments such as, vests, jackets, shirts, or coveralls. During hours of darkness, warning garments shall also have silver, orange, or strong yellow-green colored reflective material that is visible at a minimum of 1,000 feet.

To ensure maximum employee visibility to approaching traffic, warning garments in the appropriate color (orange, strong yellow-green or fluorescent versions) shall be worn. The following rules apply **during daylight hours**:

- A vest of appropriate color equipped with reflective material is the standard for all Caltrans operations.
- Vests, jacket, or coveralls of appropriate color without reflective material, or shirts (button or pullover) of appropriate color may be worn only during daylight hours.
- Warning garments shall be worn whenever working on-foot, within the right-of-way or near vehicular or equipment traffic.
- Flaggers shall wear warning garments of appropriate color on the upper body. White coveralls may also be worn to increase visibility.
- Raingear must be of appropriate color on the upper body, or a standard vest must be worn over the raingear.

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To ensure additional visibility at night, warning garments in the appropriate color (orange, strong yellow-green, or fluorescent versions) shall also be equipped with reflective material (silver, orange, or strong yellow-green fluorescent versions) that is visible at a minimum of 1,000 feet. The following rules apply **during hours of darkness**:

- Warning garments of appropriate color equipped with reflective material and worn over white coveralls are required whenever working on-foot, within the right-of-way or near vehicular or equipment traffic. White coveralls equipped with reflective material conforming to the ANSI/ISEA 107-1999 standard may be worn in lieu of the colored reflective vest.
- A jacket of appropriate color equipped with suitable reflective material may be worn over white coveralls.
- Raingear must be of appropriate color on the upper body and equipped with reflective material, or a standard vest equipped with reflective material must be worn over the raingear.

Supervisors may allow white clothing, such as white shirt on upper body and long white pants on lower body, or white paper coveralls as a substitute for white cloth coveralls.

THE FOLLOWING APPLIES TO ALL WARNING GARMENTS:

White coveralls or other white clothing should not be worn during snow or fog conditions. The warning garments of appropriate color equipped with reflective material should be considered during periods of dawn, sunrise, dusk, sunset, and inclement weather.

Warning garments that are faded, damaged, or have low visibility shall be discarded. Warning garments that are contaminated by a hazardous material should not be laundered at home. If warning garments with reflective material are laundered at home, use mild detergent and low heat settings to avoid damage to the reflective material.

Employee-owned, or visitor-owned, warning garments must comply with this section, or shall not be worn. Supervisors shall ensure that warning garments are of the appropriate color and maintained in a safe and sanitary condition. (See Section 12.04 of this chapter for additional information about PPE standards.)

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### **12.21 RAINGEAR - Jackets and Pants**

Employees shall be provided with raingear to protect them from exposure to rain, snow, or other wet conditions.

The standard raingear for Caltrans consists of orange upper body, yellow arms with reflective material. Lower body is single color yellow pants.

See Section 12.20 WARNING GARMENTS: VEST, JACKETS, SHIRTS, AND COVERALLS for additional information.

### **12.22 FOOT PROTECTION**

Section 3385, Foot Protection, in the General Industry Safety Orders (GISO) requires:

- Employee footwear must be appropriate for the hazard to which the employee will be exposed and provide protection from hot, corrosive, poisonous substances, falling objects, crushing or penetrating actions which may cause injuries to the foot.
- The footwear shall also provide protection from slips, falls, and moisture for employees who are required to work in abnormally wet locations.
- Footwear which is defective or inappropriate to the extent that its ordinary use creates the possibility of foot injury shall not be worn.
- Safety-toe footwear purchased after January 12, 1995 shall meet the requirements and specifications in American National Standard (ANSI), Footwear Z41-1991.

It is Caltrans policy that employees are responsible to provide their own footwear.

Caltrans will furnish footwear for special work activities including metal toe covers, high top rubber boots, hip waders, or rubber overshoes for use during inclement weather.

Supervisors are responsible to ensure that employees wear appropriate footwear for the task and/or work area in which they are assigned.

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**OFFICE WORK** - As a general rule most shoes are acceptable footwear for office work activities.

However, when leaving the office to make a field trip to a construction or maintenance work zone, or working/walking on a freeway or highway, additional foot protection may be necessary. Leaving the office to visit another building or driving a vehicle to another city would not generally require additional foot protection.

Athletic or running shoes are considered acceptable foot protection for some types of fieldwork activities. For example, if an employee is going to walk along the paved shoulder of a highway or city sidewalk where the walking surface is level, athletic shoes should be considered acceptable footwear.

**FIELD WORK** - As a minimum, appropriate footwear for employees working in field work assignments; highway maintenance, highway landscape, construction, surveys, equipment shops, and/or building maintenance environments such as painters, plumbers, electrician, or similar work activities is defined as:

"A serviceable leather work shoe or boot with soles made of neolite, neoprene, crepe rubber, or similar material which will not disintegrate or be affected by petroleum solutions and will retain a non-slip surface under wet, damp, oily, or muddy conditions."

• **UNACCEPTABLE FOOTWEAR**

The following are examples of unacceptable footwear for employees who work in field assignments:

- sandals and slippers,
- open toe shoes and/or high heels,
- footwear with leather soles, or
- any type of "loose open weave upper"

"Loose open weave upper" is defined as footwear which has been fabricated with loose open weave which would allow liquids to easily penetrate the fabric.

The reference to loose open weave is not intended to prohibit the use of footwear which has been fabricated with portions of Gortex, nylon, or other similar tightly woven fabrics which prohibit or impedes penetration of the fabric.

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Generally, shoes that are not specifically fabricated for use in work environments found in highway maintenance and or highway construction activities would fall into the category of prohibited footwear for the purposes of this interpretation.

For example, athletic or running shoes are not acceptable foot protection for fieldwork in maintenance, construction, surveys, or similar work activities.

- **FOOT PROTECTION FROM CHEMICAL HAZARDS**

When using hazardous materials such as chemical herbicides, methacrylate, or other similar materials, the supervisors shall read the product label and the Material Safety Data Sheet (MSDS) to determine the type and level of foot protection required. The supervisors should ensure that the employee's footwear provides adequate foot protection from the hazardous material being used.

- **FOOT PROTECTION FROM CRUSHING HAZARDS**

When working with heavy beams, materials drill rods, jackhammers, etc., where the employee's foot can be crushed or cut, appropriate foot protection shall be required that meets (ANSI Z41 - 1991). Toe caps or metatarsal guards are available. For specialized situations contact the Headquarters or District Safety and Health Office for assistance.

## **12.23 JEWELRY**

Section 3384, Hand Protection, Note 2. of the Cal-OSHA, General Industry Safety Orders (GISO) states:

- Wrist watches, rings, bracelets, pendants, earrings, or other jewelry should not be worn while working with or around machinery with moving parts, storage batteries, or around electrically-energized equipment.



**12.24 ELECTRICAL PROTECTION**

The Electrical Safety Orders (ESO) are contained in Subchapter 5 of the Cal-OSHA regulations. The following is a brief overview of some of the common electrical safety order regulations that shall be followed in Caltrans operations.

This information is general in nature and should not be used as a substitute for the entire electrical standards contained in the ESO.

The Electrical Safety Orders (ESO) provide minimum standards to safeguard life or limb, health, property of employee and public welfare by regulating and controlling the design, construction, quality of materials, and use of electrical devices and apparatus.

Sections 2320.1 through 2320.9 of the Electrical Safety Orders (ESO) requires:

- Only qualified persons shall work on electrical equipment or systems.
- Only qualified persons shall be permitted to perform any function in proximity to energized parts.
- Employees who are exposed to electrical hazards as a result of installing, operating, maintaining, or inspecting electrical apparatus shall be provided with appropriate electrical protective devices, which include hard hats, safety glasses, gloves, aprons, or arm protectors.
- Work shall not be performed on exposed energized parts of equipment or systems unless: supervisors have reviewed the work, employees are qualified electrical workers, employees are instructed on the work techniques and hazards involved, suitable personal protective equipment is used, suitable eye protection is used, suitable barriers, tags, or signs are in place and a final inspection is made.
- Hard hat protection must comply with Section 12.05, Head Protection.
- Electrical battery storage and battery handling areas must be equipped with emergency drench showers and eye wash stations. Employees must wear eye protection with side as well as frontal protection and acid-resistant gloves and aprons.
- Electrical protective devices shall conform with applicable ANSI standards. For specific information covering electrical work, contact an electrical supervisors or superintendent located in each Caltrans district.

## 12.25 FALL PROTECTION

Fall protection must be used whenever an employee is exposed to falling more than 7½ feet to the ground or level below. Fall protection is usually provided by standard guardrails or barriers, which protect the edge. Otherwise, either a personal fall restraint or personal fall arrest system is required. **All employees using aerial lift equipment must use a personal fall protection system.**

### ➤ STANDARD GUARDRAILS

These are the preferred method of fall protection. They prevent the employee from falling.

- Standard guardrails consist of a top rail and a mid rail that must be between 42 to 45 inches high, and must protect openings on all open sides.
- Refer to Title 8 CCR § 3209 for specific guardrail construction requirements.

### ➤ PERSONAL FALL RESTRAINT SYSTEM

The purpose of a personal fall restraint system is to prevent an employee from falling. This system restrains the employee from approaching the edge.

A personal fall restraint system consists of:

- A body belt (or body harness with side D-rings),
- An anchorage point capable of supporting 4 times the intended load,
- A 2 foot lanyard (for situations where a 2 foot lanyard is too short for the employee to reach their work, a longer lanyard may be used but must be rigged to prevent the employee from falling).

If the fall restraint cannot be rigged in such a way as to prevent a fall a personal fall arrest system is required.

### ➤ PERSONAL FALL ARREST SYSTEM

**The purpose of a personal fall arrest system is to arrest the employee's fall from a work level. This system allows the employee to work in situations where a fall is possible, but must limit free fall to a maximum of 4-feet.**

A personal fall arrest system consists of:

- a body harness with D-ring at the center of the back,
- a 4-foot decelerating/shock-absorbing lanyard (a longer lanyard may be used but **must be rigged to limit free fall to 4 feet**),
- an anchorage point designed to hold a minimum of 5000 pounds or, maintain a safety factor of at least two or, a means of attaching the lanyard to a substantial member of the structure with equivalent strength,
- adequate clearance to ensure the employee cannot contact the ground, any obstructions below, passing traffic, etc. in case of a fall.

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**NOTE:** A shock-absorbing lanyard will lengthen approx. 4 feet during a fall arrest, for a total length of approx. 8 feet (if rigged to allow for only a 4-foot fall as required). If the employee is 6 feet tall, at least 14 feet of clearance is required.

Fall arrest systems cannot be utilized when working in aerial equipment unless that equipment is designed to support at least 5000 pounds or it can maintain a safety factor of at least two. Because most aerial equipment cannot support this load, personal fall restraint is the preferred fall protection system in aerial lift equipment.

Specific locations requiring use of fall protection equipment include:

- employees exposed to falling over 7-1/2 feet from walkways, catwalks, scaffolds, work surfaces, bridge decks, perimeters of buildings, shaftways, openings, or sloped roofs;
- employees working on suspended scaffolds, boatswain's chairs, float scaffolds, and suspended staging;
- employees working in trees; and
- employees working in vehicle mounted elevating work platforms and aerial lift equipment (bucket trucks, pin-on-platforms, etc.).

All fall protection equipment must be properly labeled to show that it complies with ANSI Standard A10.14–1991, or Z359.1-1992.

**EXCEPTIONS:**

- Tree worker's saddles must be "approved", but do not fall under the ANSI A10.14 - 1991 standard.
- Bridge inspection and cut slope operations where specially trained employees use mountain climbing equipment. Such equipment must be labeled as meeting Union International Alpine Association (UIAA) requirements. These employees must also follow and comply with a special Code of Safe Practices prepared specifically for their operations.

Additional requirements for Fall Protection:

- Fall arrest system use requirements
  - 1) Make provisions for prompt rescue in case of a fall. At least one additional person on site, trained in use of fall arrest equipment, aerial lift, emergency lowering procedures, and the emergency rescue plan will be provided. If an outside agency (i.e. fire department) will provide rescue, advance contact to confirm availability is required.

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- 2) Position equipment to allow adequate clearance. If working over a traffic lane, the lane must be closed if contact with traffic is possible.
- 3) Employees must be secured from falls at all times. Do not use guardrails for anchorage points unless specifically designed for that purpose. (standard guardrails mounted on Caltrans sign structures are not designed for anchorage)
- Lanyards will not be knotted or tied on themselves to reduce length;
  - Lanyards will not be clipped together;
  - Snap hooks on lanyards shall be of the locking type;
  - Snap hooks shall not be hooked to loops on web lanyards;
  - No more than one snap hook shall be hooked to any one D-ring;
  - All employees who use fall protection equipment will be trained in its use;
  - All fall protection equipment will be inspected daily, before each use, and defective equipment will not be used;
  - If lanyards are attached to vertical lifelines, a separate vertical lifeline shall be provided for each employee;
  - If lanyards are attached to horizontal lifelines, up to two (2) employees may each use horizontal lifeline;
  - lifelines shall be designed and installed as required by the ANSI standards; and,
  - lanyards shall be secured to a substantial member of a structure, equipment, tree, or to securely rigged horizontal or vertical lifelines.

Inspection of fall protection equipment shall focus on:

- |                                     |                           |
|-------------------------------------|---------------------------|
| • cuts                              | • operational defects     |
| • cracks                            | • heat                    |
| • tears or abrasions                | • acid or other corrosion |
| • undue stretching                  | • overall deterioration   |
| • faulty springs                    | • mildew                  |
| • defective or distorted snap hooks |                           |

Contact the District/Headquarters Safety and Health Office for assistance.

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**12.26 WORKING OVER OR NEAR WATER**

Section 1602, Work Over or Near Water of the Construction Safety Orders, and Section 3389, Life Rings and Personal Flotation Devices of the Cal-OSHA, General Industry Safety Orders, require:

- Where there is a danger of drowning, employees must wear a U.S. Coast Guard approved personal flotation device.
- At least one (1) approved 30-inch life ring with not less than 150 feet of 600 pound capacity line attached shall be kept readily available.
- Life rings shall not be more than 200 feet apart.
- Any personal flotation device shall be approved by the U.S. Coast Guard as a Type I PFD, Type II PFD, Type III PFD, or their equivalent.
- Personal flotation devices shall be maintained in good condition.
- These items must be inspected before and after each use for defects that would alter their strength or buoyancy.
- They shall be removed from service when damaged so as to affect their buoyant properties or capability of being fastened.
- One or more lifesaving boats will be readily accessible at all times. Boats shall be properly maintained, ready for emergency use and equipped with oars and oarlocks, boat hook, anchor, ring buoy with 50 feet of 600 lb. Line and 2 life preservers. Oars are not required with boats with outboard motor.

If lifeboats cannot be used because of swift currents, lines shall be stretched across stream with tags or floating planks at intervals less than six (6) feet. If impracticable, other arrangements to provide effective lifelines shall be provided.

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**PRESCRIPTION SAFETY GLASSES/LOCAL REQUEST****FORM ADM 0205**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**PRESCRIPTION SAFETY GLASSES/LOCAL REQUEST**  
ADM-0205 (REV. 5/93)

**PERSONAL INFORMATION NOTICE**

Pursuant to the Federal Privacy Act (P.L. 93-579) and the Information Practices Act of 1977 (Civil Code Sections 1798, et seq.), notice is hereby given for the request of personal information by this form. The requested personal information is voluntary. The principle purpose of the voluntary information is to facilitate the processing of this form. The failure to provide all or any part of the requested information may delay processing of this form. No disclosure of personal information will be made unless permissible under Article 6, Section 1798.24 of the IPA of 1977. Each individual has the right upon request and proper identification, to inspect all personal information in any record maintained on the individual by an identifying particular. Direct any inquiries on information maintenance to your IPA Officer.

STATE FURNISHED PRESCRIPTION SAFETY GLASSES will be provided to employees who wear prescription eye glasses and work in field locations where there is a risk of receiving eye injuries such as punctures, abrasions, burns or contusions as a result of contact with flying particles, hazardous substances, projections, or light rays in connection with welding operations.

**"Employees who do not regularly work in locations where there is a risk to eye injury do not qualify for State furnished safety glasses."**

See the Caltrans Employee Safety and Health Manual, Chapter 12-Personal Protective Equipment, for additional information regarding State furnished eye glasses.

**I WORK WITH AND/OR AROUND:**

☐ AN AREA WHERE THERE  
IS RISK OF EYE INJURY  
AS STATED ABOVE.

☒ PESTICIDES  
(May qualify for  
safety glasses)

**SEND GLASSES TO:**

EMPLOYEE'S NAME (TYPE OR PRINT)		EMPLOYEE'S SIGNATURE	
EMPLOYEE'S BUSINESS PHONE		EMPLOYEE'S CLASSIFICATION	
BRANCH		JOB ASSIGNMENT (Include all areas of performance)	
BUSINESS ADDRESS			
CITY	ZIP CODE		
SUPERVISOR'S NAME (Print or Type)		SUPERVISOR'S SIGNATURE OF AUTHORIZATION	
SUPERVISOR'S BUSINESS ADDRESS		BRANCH	
OPTOMETRIST OR HOSPITAL NAME		OPTOMETRIST OR HOSPITAL PHONE NUMBER	
BUSINESS ADDRESS		CITY	STATE ZIP CODE

SOURCE		CHG DIST	EXPENDITURE AUTHORIZATION	SUB - JOB	PREFIX	SPECIAL DESIGNATION	F.A.	AGCY. OBJ.	AMOUNT
DIST.	UNIT								

ADDITIONAL COMMENTS

**OFFICE USE ONLY**

STYLE OF FRAMES LOANED		DATE LOANED		DATE FRAMES RETURNED	
FIRST PAIR		DATE RX SENT TO PIA		SECOND PAIR	
<input type="checkbox"/> CLEAR <input type="checkbox"/> TINTED <input type="checkbox"/> PHOTOGRAY				<input type="checkbox"/> CLEAR <input type="checkbox"/> TINTED <input type="checkbox"/> PHOTOGRAY	
GLASSES RECEIVED BY		DATE GLASSES RECEIVED		GLASSES RECEIVED BY	
DATE GLASSES RECEIVED				DATE GLASSES RECEIVED	
<input type="checkbox"/> FIRST PAIR		DATE		GLASSES WERE RETURNED TO PIA BECAUSE:	
<input type="checkbox"/> SECOND PAIR		GLASSES RETURNED TO PIA			

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

JULY 1996

12-30

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## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 13

## **HEARING PROTECTION PROGRAM**

### **HOW TO PROTECT YOUR HEARING**

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JULY 1996

HEARING PROTECTION

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**HEARING PROTECTION PROGRAM**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 13

## **HEARING PROTECTION PROGRAM**

### **HOW TO PROTECT YOUR HEARING**

#### **13.00 INTRODUCTION**

This chapter describes the Department's Hearing Protection Program. The Program is designed to protect employees\* from hearing loss through the introduction of engineering controls, implementation of administrative controls, or through the use of personal protective equipment (PPE).

#### **13.01 PURPOSE**

The purpose of this chapter is to provide details about Cal-OSHA regulations that require employers to institute a Hearing Protection Program for employees\* that meet established criteria.

\*The Headquarters Office of Safety and Health identifies specific classifications for mandatory enrollment in the Department's Hearing Protection Program. The Department's Hearing Protection Program, as described in this chapter, does not include prospective employees who are subject to pre-employment physicals to establish a baseline audiogram test record. See Section 13.05 - Enrollment and Classifications for details.

#### **13.02 POLICY STATEMENT**

Employees who work where there is probable exposure to noise levels that may equal or exceed an 8-hour time-weighted average sound level of 85 decibels (dB) shall be tested and enrolled in the Department's Hearing Protection Program.

#### **13.03 Cal-OSHA REQUIREMENTS**

The General Industry Safety Orders (GISO), Control of Noise Exposure, covered under Sections 5095 through 5100, and Section 1521 of the Construction Safety Orders (CSO) requires the Department to administer a hearing protection program.

GISO Section 5097(a) requires that whenever any employee's exposure may equal or exceed an 8-hour time-weighted average sound level of 85 dB, the supervisor must obtain noise level measurements of the employee's exposure.

The results of these noise level measurements are used to identify work activities and associated civil service classifications for enrollment into the Hearing Protection Program. Once an employee is enrolled in the Program, the employee is required to have an audiogram test and then must be tested annually thereafter.

The regulations further require that engineering controls are the first priority, followed by administrative controls, and personal protective equipment (PPE) which is the last preferred method to be used to control noise level exposure. These are described as follows:

1. **Engineering Controls.** Making changes in the machinery, the way the machine operates, or the design of the structure in which the machinery is housed can control noise. Engineering controls include barriers, damping, isolation, muffing, noise abortion, mechanical isolation, variations in force, pressure or driving speed and combinations of these.
2. **Administrative Controls.** These controls limit the length of time workers are exposed to noise in the work area. They involve assigning work to less noisy areas so that the average of the employee's daily exposure is less than 85 dB. The choice of which kind of controls to be used is governed by the particular noise control problem being encountered.
3. **Personal Protective Equipment (PPE).** When engineering and/or administrative controls either fail to reduce noise to within required limits or are not technologically feasible, ear plugs or ear muffs must be used. The Department provides all hearing protection equipment.

#### 13.04 ROLES AND RESPONSIBILITIES

The Headquarters Office of Safety and Health administers the Caltrans Hearing Protection Program by providing statewide policy and direction. The Office of Safety and Health shall:

- Identify Caltrans work activities which expose employees to noise levels that equal or exceed the Cal-OSHA dB standard set by GISO Section 5097.
- Identify the civil service classifications associated with work activities that expose employees to noise levels that equal or exceed the Cal-OSHA dB standard, and require audiogram testing.
- Provide District Safety and Health Officers, managers, supervisors, and others with information about identified work activities, and classifications requiring enrollment into the Program.

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The Office of Personnel Operations staff (in the North and South Administrative Service Centers) shall:

- Maintain employee medical files, including records of audiometric testing.
- Provide required medical records, upon request, to employees, former employees, and representatives designated by the individual employee, or authorized representative of Cal/OSHA, as required by GISO Section 5100(e).

The District Safety and Health Officers and staff shall:

- Inform managers and supervisors about Program requirements, and ensure that employees in identified work activities and classifications are enrolled in the Program.
- Arrange service contracts with licensed or certified audiologist, physician, or certified audiometric technicians.
- Provide a copy of the AUDIOMETRIC EVALUATION, Form PM-S-0003, to supervisors for their employees who are scheduled to have an audiogram.
- Provide information to managers and supervisors regarding engineering controls, administrative controls, and personal protective equipment (consistent with changes in protective equipment and processes).
- Conduct periodic safety inspections to monitor work operations and new equipment to identify potential exposure to noise levels that may equal or exceed the Cal/OSHA dB standard.
- Ensure that a copy of Article 105, Control of Noise Exposure, from the GISO, is made available, upon request, to affected employees or their representative. A copy shall be posted at each workplace [see Section 5099(b)(1)] where employees in identified classifications are enrolled in the Program.

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Managers and Supervisors shall:

- Ensure that employees in identified work activities or classifications are enrolled in the Program, arrange and schedule audiogram testing upon initial enrollment, and annually thereafter, notify employees of the results of the audiogram.
- Provide a copy of the AUDIOMETRIC EVALUATION, Form PM-S-0003, to employees who are scheduled to have an audiogram.
- Maintain copies of noise exposure measurement records. (Forward all medical records, including audiogram testing, to the Office of Personnel Operations at the North or South Administrative Service Center.)
- Ensure that employees receive training regarding the effects of noise on human hearing when initially enrolled and annually thereafter.
- Provide ear plugs or ear muffs, and make available, as needed, a variety of suitable hearing protection equipment to employees.
- Request periodic safety inspections to monitor work operations and new equipment to identify potential exposure to noise levels that may equal or exceed the Cal/OSHA dB standard.
- Ensure that when an employee, enrolled in the Hearing Protection Program, is transferred, all valid exposure records are sent to the employee's receiving supervisor.

\* \* \* \* \*

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**13.05 ENROLLMENT AND CLASSIFICATIONS**

The Headquarters Office of Safety and Health has identified the following classifications for mandatory enrollment in the Department's Hearing Protection Program:

<b>Class Code</b>	<b>Class Title</b>
6378	Heavy Truck Driver *
6514	Lead Structural Steel Painter
6517	Structural Steel Painter
6519	Structural Steel Painter - Apprentice
9381	Tree Maintenance Worker
9382	Tree Maintenance Leadworker, Caltrans
1707	Toll Collector

\* This identified class covers only Transport Drivers assigned to the Equipment Service Center who are engaged in equipment loading, unloading and, transport of heavy equipment.

NOTE:

Prospective employees who are required to have a pre-employment physical and an audiogram to establish a baseline hearing record are not included in the Department's Hearing Protection Program. The pre-employment audiogram process is for prospective employees; whereas, the Hearing Protection Program is designed for permanent employees.

The pre-employment audiogram testing process is not based on Cal-OSHA regulations, but is based on Departmental policy. This process is designed to establish a hearing record for prospective employees that can be used in support of, and/or in defense of future workers' compensation claims for alleged hearing loss.

SPECIAL NOTE FOR PERSONNEL OFFICERS and STAFF:

Audiogram testing for pre-employment physicals are to be conducted as described in Section 13.06, MONITORING AND TESTING PROCEDURES.

Contact the Headquarters or District Office of Safety and Health for additional information.

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**13.06 MONITORING AND TESTING PROCEDURES****NOTE:**

The test procedures described below shall be followed for both employees enrolled in the Hearing Protection Program contained in this chapter, and prospective employees who are subject to pre-employment physicals to establish a baseline audiogram test record.

Employees exposed to workplace noise at or above the 85 dB Action Level shall be tested to establish a baseline to which subsequent audiograms can be compared.

Audiometric testing shall be conducted by a licensed or certified audiologist, a physician, or a certified audiometric technician.

The audiometric examination shall be administered in accordance with the American Medical Association Current Procedural Terminology Coding Manual (CPT-4), Number 92552, defined as "pure tone audiometry (threshold) air only."

Audiometric testing shall be conducted in accordance with GISO Section 5097, HEARING CONSERVATION PROGRAM. Specific audiogram tests shall comply with Section 5097(c) Audiometric Testing Program, 5097(d) Evaluation of Audiogram, and 5097(e) Audiometric Test Requirements, and Appendix A - F.

Contact the Headquarters or District Safety and Health Office for interpretation, implementation, or further details regarding the Cal-OSHA monitoring and testing regulations.

A sample of the AUDIOMETRIC EVALUATION, Form PM-S-0003, is shown at the end of this chapter.

**13.07 TRAINING**

Supervisors shall ensure that each employee receives training when initially enrolled and annually thereafter. Training shall include:

1. The effect of harmful exposure to various noise levels on human hearing.
2. The purpose, advantages, and disadvantages of hearing protection devices.
3. The purpose of annual testing and an explanation of the testing procedures.
4. Instructions on selection, fitting, and the use and care of hearing protectors.

It is recommended that the brochure titled, "Hearing Conservation, A Guide to Preventing Hearing Loss," printed by the KRAMES Communication, or equivalent be used. Contact the Headquarters Office of Safety and Health for information.

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**13.08 RECORD KEEPING**

Employee audiogram information shall be retained in the employee's medical file\* and shall include:

1. Name and job classification of the employee,
2. Date of audiogram,
3. Examiner's name,
4. Date of last calibration of the audiometer, and
5. Employee's most recent noise exposure assessment

\* Employee medical files are maintained at the North and South Administrative Service Centers.

NOTE:

Supervisors should retain copies of noise exposure measurement records for their own files, and forward all medical records to the Office of Personnel Operations at the appropriate Administrative Service Center for retention.

GISO Section 5100(d)(1) (2) require that employee audiometric hearing baseline records be retained in the personnel file for the duration of employment. All supplemental noise exposure measurement records shall be retained in the supervisor's file for two (2) years.

Ensure that when an employee, enrolled in the Hearing Protection Program, is transferred, all valid exposure records are sent to the employee's receiving supervisor.

GISO Section 5100(e) requires that hearing records shall be provided, upon request, to employees, former employees, and representatives designated by the individual employee, or authorized representative.



**13.09 DEFINITIONS AND TERMINOLOGY**

**Action Level** - The General Industry Safety Orders has established that an eight hour time weighted average (TWA) of 85 decibels (dB) is the point when the employer must enroll employees in a hearing conservation program.

**Administrative controls** - Management's limiting of workplace noise exposure through the rotation of personnel or reduction in time spent by employees in a noisy environment. Includes mandating the use of personal protective devices.

**Audible Range** - The range in cycles per second (20-20,000 Hz) that the human ear can hear.

**Audiogram** - Recorded results of an audiometric examination.

**Audiometric Examination** - Hearing test conducted by or under the supervision of a licensed physician or audiologist.

**Baseline Audiogram** - The initial audiogram against which all future audiograms are to be compared.

**Engineering Controls** - Management-initiated physical measures or devices installed on equipment or in the work environment that will reduce workplace noise levels to acceptable limits.

**Calibrate** - The procedure used to check an audiometer for uniformity or accuracy.

**Decibel** - A unit for expressing the relative intensity of sound. A decibel is commonly referred to as "dB."

**Exposure Measurement Record** - Required whenever information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dB.

**Frequency** - The number of sound vibrations per second in units of Hertz (Hz) or cycles per second.

**Hertz** - The unit of measurement of frequency, numerically equal to cycles per second.

**Sound Level Meter** - An instrument for the measuring of sound.

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**Standard Threshold Shift** - A confirmed change in hearing relative to the baseline audiogram of an average of 10 dB or more at 2,000, 3,000, and 4,000 Hz in either ear.

**Speech Frequencies** - The range in cycles per second (500-4,000 Hz) at which normal speech can be heard.

**Sound** - The sensation produced through the organs of hearing by vibrations transmitted in a material medium, usually air.

**Temporary Threshold Shift** - A change in hearing relative to the baseline audiogram of an average of 10 dB or more at 2,000, 3,000, and 4,000 Hz in either ear, caused by exposure to loud noise prior to an audiometric examination. Example: rock concert the night before, cutting wood with a chain saw, etc.

**Threshold** - The point at which a person just begins to notice a tone is becoming audible.

**Time Weighted Average (TWA)** - The average exposure to noise over an eight (8) hour work shift, as determined by actual noise level samples taken during the work shift.

### 13.10 TYPICAL NOISE LEVELS

The following list illustrates various noise levels that individuals may encounter:

140 dB	Jet airplane taking off at 50 feet
130 dB	Approximate threshold of pain in human ear
120 dB	Jet airplane takeoff at 200 feet
115 dB	Brush chipper
110 dB	Chain saw
100 dB	Snow blower
90 dB	Paving machine
85 dB	Freeway noise
80 dB	Riding in vehicle, window down
70 dB	Conversation at 1 foot
60 dB	Conversation at 3 feet
50 dB	Business office, typical home
40 dB	Outside noise, quiet residential area

**AUDIOMETRIC EVALUATION****FORM PM-S-0003**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**AUDIOMETRIC EVALUATION FORM**  
PM-S-0003 (REV. 5/98)

**PERSONAL INFORMATION NOTICE**

Pursuant to the Federal Privacy Act (P.L. 93-579) and the Information Practices Act of 1977 (Civil Code Sections 1798, et seq.), notice is hereby given for the request of personal information by this form. The requested personal information is voluntary. The principal purpose of the voluntary information is to facilitate the processing of this form. The failure to provide all or any part of the requested information may delay processing of this form. No disclosure of personal information will be made unless permissible under Article 6, Section 1798.24 of the IPA of 1977. Each individual has the right upon request and proper identification to inspect all personal information in any record maintained on the individual by identifying particular. Direct any inquires on information maintenance to your IPA Officer.

This information is required for all State-provided audiograms.  
Shaded area to be filled out by physician/audiologist.  
All other information to be supplied by employee - Please print.

EMPLOYEE LAST NAME	FIRST NAME	M.I.	DISTRICT	UNIT
SOCIAL SECURITY #		CLASSIFICATION	DATE OF BIRTH	SEX

RIGHT EAR							LEFT EAR						
500	1000	2000	3000	4000	5000	6000	500	1000	2000	3000	4000	5000	6000
OTOSCOPY RIGHT							LEFT						

**Please answer the questions below:**

- Have you ever had a head injury with unconsciousness ☐ YES ☐ NO
- Have you ever had severe dizziness? ☐ YES ☐ NO
- Have you ever had ear surgery? ☐ YES ☐ NO
- Have you ever had severe ear infections? ☐ YES ☐ NO
- Have you ever had exposure to noise in previous jobs? ☐ YES ☐ NO
- Have you ever had exposure to noise in military service? ☐ YES ☐ NO
- What Branch: ☐ Army ☐ Navy ☐ Air Force ☐ Marines ☐ Other
- Were you in combat? ☐ YES ☐ NO
- Do you participate in noisy hobbies (motorcycles, firearms)? ☐ YES ☐ NO
- All jobs included, how many years have you worked in noise?
- Do you wear a hearing aid? ☐ LEFT ☐ RIGHT ☐ BOTH ☐ NO
- Do you have a cold? ☐ YES ☐ NO
- Are you taking antibiotic? ☐ YES ☐ NO
- Do you have ear drainage or pain? ☐ LEFT ☐ RIGHT ☐ BOTH ☐ NO
- Do you have a perforated ear drum? ☐ LEFT ☐ RIGHT ☐ BOTH ☐ NO
- Do you have ringing in your ears? ☐ LEFT ☐ RIGHT ☐ BOTH ☐ NO
- Do you have known hearing loss? ☐ LEFT ☐ RIGHT ☐ BOTH ☐ NO
- At the end of your shift do your ears ring? ☐ YES ☐ NO
- Did you work in noise today? ☐ YES ☐ NO
- Did you use hearing protection? ☐ YES ☐ NO

I certify that the above statements and answers to the above questions are accurate to the best of my knowledge and that the results of my hearing test may be used to carry out a hearing conservation program.

EMPLOYEE SIGNATURE	DATE
NAME OF AUDIOMETRIC EXAMINER	DATE OF LAST ACOUSTIC OR EXHAUSTIVE CALIBRATION OF AUDIOMETER

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# CHAPTER 14

## CONFINED SPACES

### **SAFETY AND HEALTH PROCEDURES FOR CONFINED SPACES**

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JULY 1996

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**CONFINED SPACES**

**THIS SPACE AVAILABLE FOR NOTES:**

# CHAPTER 14

## CONFINED SPACES

### SAFETY AND HEALTH PROCEDURES FOR CONFINED SPACES

#### 14.00 INTRODUCTION

This chapter represents the Department's written Confined Space Program as required by the General Industry Safety Orders (GISO), Sections 5156 through 5158.

##### 14.01 PURPOSE

The purpose of this chapter is to familiarize supervisors and employees with the Department's Confined Space Program, the hazards of confined spaces, monitoring equipment, operating procedures, and other relevant information to prevent injury or illness during confined space operations.

##### NOTE:

- **Maintenance Program employees** will also follow the applicable Maintenance Code of Safe Operating Practices, "Pump House Maintenance", and/or "Appendix A - Confined Space Entry Procedures", a copy is included at the end of this chapter.
- **Construction Program employees** and **Structures Program employees** will also follow the applicable Construction Code of Safe Practices, "Confined/Enclosed Spaces", and "Appendix A-1 - Confined Space Entry Procedures", a copy is included at the end of this chapter.
- Use the "Confined Space Guidelines", included at the end of this chapter, as a checklist for confined space operations.

##### 14.02 POLICY STATEMENT

Caltrans employees will not enter a confined space or potential confined space unless they have been trained in and are following the requirements and procedures described in this chapter.

### 14.03 DEFINITION OF A CONFINED SPACE

A confined space is any location that meets the following definition:

1. an employee can physically enter, and
2. has limited or restricted means of entry or exit, and
3. is not designed for continuous employee occupancy.

Confined spaces include structures or facilities such as tanks, bridge cells, shafts, pits, bins, tubes, pipelines, deep trenches, vaults, vats, pump houses or compartments, sewage lift stations, culverts, cofferdams, elevator pits, or similar locations.

#### NOTE:

For contract administration purposes, construction contractors may use a slightly different definition of a confined space. Under the contractor's definition BOTH of the following conditions MUST exist.

1. existing ventilation is insufficient to remove dangerous air contamination and/or oxygen deficiency which may exist or develop, and
2. ready access or egress for the removal of a suddenly disabled employee is difficult due to the location and/or size of the opening(s).

### 14.04 HAZARDS OF CONFINED SPACES

Confined spaces contain unique hazards that require special training, work procedures, and equipment. These hazards can be divided into two broad categories: a) **atmospheric hazards** (dangerous air), and b) **physical hazards**.

**NOTE:** The use of gasoline or diesel powered equipment in confined spaces creates special hazards and requires special precautions, see Section 14.10.

#### **a) ATMOSPHERIC HAZARDS (Dangerous Air)**

The most common atmospheric hazards of confined spaces are:

- 1) oxygen deficient/oxygen enriched atmosphere; and/or,**
- 2) flammable atmosphere; and/or,**
- 3) toxic atmosphere, and/or,**
- 4) poor ventilation.**

## 1) Oxygen Deficient/Oxygen Enriched Atmospheres

An oxygen-deficient atmosphere exists when there is less than 19.5 percent oxygen in the air. An oxygen concentration of 20.9 percent oxygen is necessary for normal breathing.

The following list illustrates some of the dangers associated with different concentrations of oxygen:

20.9% oxygen is required for normal breathing;

**19.5% oxygen is the minimum for safe entry;**

16% oxygen causes impaired judgement and breathing;

14% oxygen causes faulty judgement and rapid fatigue;

6% oxygen causes difficult breathing and death in minutes;

Permanent brain damage starts after 4 minutes of oxygen deficiency.

Oxygen levels can decrease within a confined space for a variety of reasons:

- Oxidation (rusting) or fermentation can use up oxygen.
- Absorption - charcoal beds can absorb oxygen and remove it from the air.
- Displacement - other gases (carbon monoxide, nitrogen, methane, etc.) can displace oxygen from the space, or make the oxygen unavailable.
- Work processes - procedures using flames (welding, cutting, brazing, heating, burning) can use up oxygen within the space.

Lack of oxygen can cause asphyxiation, which is leading cause of death in confined spaces due to lack of oxygen in the blood. The two general types of asphyxiation are:

- Chemical asphyxiation - carbon monoxide blocks the body's ability to use oxygen.
- Physical asphyxiation - solvents, vapors, oxidation, open flames, and microbial processes displace or remove the oxygen from the air.

An oxygen enriched atmosphere (above 23.5%) can be caused by work processes, or ventilation procedures. An oxygen enriched atmosphere causes combustible materials; such as clothing, hair, wood, oils, or solvents, to burn violently. High oxygen levels can also cause spontaneous combustion, even without a source of ignition.

**Never use welding oxygen to ventilate a confined space.**



## 2) Flammable Atmospheres

Because of minimal ventilation and limited air space, flammable materials can create a significant problem in confined spaces. If a flammable gas, vapor, or dust is present in the proper concentration, and an ignition source is introduced, an explosion or flash fire can occur. The lowest concentration in air at which ignition will occur is called the "lower explosive limit" (LEL).

**NEVER INTRODUCE ANY SOURCE OF IGNITION OR SWITCH ON ANY ELECTRICAL MOTOR OR LIGHT IN A CONFINED SPACE UNLESS YOU ARE POSITIVE THAT A FLAMMABLE ATMOSPHERE DOES NOT EXIST.**

**SMOKING IS PROHIBITED INSIDE CONFINED SPACES.**

Because the LEL varies for different flammable materials (e.g., gasoline = 1.4%, methane = 5.3%, hydrogen sulfide = 4.0%), Cal-OSHA has established 10% of the LEL as the alarm setting for combustible gas indicators. To provide an extra margin of safety, **Caltrans policy does not allow entry into atmospheres with detectable levels of flammable materials (>1% of LEL).**

There are a number of possible sources for flammable atmospheres in a confined space. These include:

- Gasoline or other flammable liquids from spills or accidents on the highway, that enter the space through drop inlets or drains.
- Paints, thinners, solvents, aerosol sprays, or other flammables being used inside the space.
- Methane and/or Hydrogen Sulfide from decomposition of organic matter inside the space.
- Acetylene and other flammable gases from welding, torching, cutting, brazing, or heating inside the space.
- Flammable liquids or gases entering the space through underground storm drains, pipelines, sewers, etc., or through the ventilation system.
- Carbon monoxide accumulations in tunnel/tube exhaust ducting.

To minimize these sources, the preferred method is to block off, seal, or disconnect all pipelines, drains or vents that would allow flammable liquids or vapors to enter the space. If this is not possible, then the outside attendant must monitor outside conditions and alert the workers inside if something happens; i. e., traffic accident, chemical release, flash flood, sudden rain, etc., that could impact them.

In areas where outside spills and releases occur frequently, a survey of local drains that serve the confined space may be necessary before entry.

Inside sources can be controlled by minimizing the use of flammable materials or processes, and by providing continuous ventilation and monitoring.

To prevent the build-up of flammable or toxic materials, use continuous ventilation and monitoring during work inside confined spaces.

Flammable vapors and gases can be heavier or lighter than air, so proper air monitoring requires checking both near the floor and at the ceiling, particularly in corners and other areas with poor air circulation.

Dusts can also create an explosive hazard. If dusts reduce visibility to 5 feet or less, an explosive hazard may exist. Use additional ventilation or change work practices to reduce dust.

### **3) Toxic Atmospheres**

Confined spaces often contain toxic atmospheres. Work processes may release toxic materials, hazardous materials may enter the space from outside sources, or toxic materials could be stored in the space and then released from the walls or hidden pockets after the space is emptied or the contents are disturbed.

**NOTE: Even if the atmosphere tests "OK" for oxygen and flammable gases, a toxic atmosphere can still exist.**

Two toxic gases often present in confined spaces are:

Carbon Monoxide - a colorless, odorless gas usually generated in gasoline engine exhaust and combustion devices. Welding and cutting can also create carbon monoxide. Often introduced into confined spaces from outside vehicles and traffic. It can cause asphyxiation and is flammable.

Hydrogen Sulfide - a colorless gas that smells like "rotten eggs" at very low levels, but deadens the sense of smell during continuous exposure to low levels and immediately at higher levels. Fatal in two or three breaths at high concentrations. It originates from decomposition of organic matter and microbe action. Often found in connection with sewer lines and sewage treatment. It is flammable and explosive.

An additional source of toxic gases is materials running into, or being used inside, the confined space. Fuels, paints, bug sprays, lubricants, cleaners, thinners, solvents, and other hazardous materials, particularly those containing petroleum products (e.g., gasoline, xylene, toluene, acetone, etc.) can create toxic atmospheres in confined spaces.

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**To minimize hazards from work materials used in confined spaces, always review the Material Safety Data Sheet (MSDS) of the material before using it inside a confined space.**

Be alert for warning labels that state, “use only in areas with good ventilation”, or, “use indoors requires extra ventilation.” Avoid using materials that warn of drowsiness or intoxication from inhalation of vapors. Avoid materials with a high vapor pressure, this indicates that they readily evaporate. Know the symptoms of overexposure before using these types of materials.

Although many of these materials are also flammable, they are toxic at levels well below the LEL. For example: the LEL for gasoline is 1.4% concentration in air. This equals 14,000 parts per million (ppm). The Cal-OSHA permissible exposure limit (PEL) for 8 hours is 300 ppm, the short term exposure limit (STEL) is 500 ppm for 15 minutes. Even at 10% of the LEL (1400 ppm) the concentration of gasoline vapors is more than four times the allowable exposure.

As shown above, a positive LEL reading (> 1 % above background levels) is a good indication that toxic materials may be present. This is the basis for the Caltrans policy of not exceeding 1% of the LEL while working in confined spaces.

Unfortunately, there are also some materials that are non-flammable and toxic. These require special monitoring equipment and procedures. Careful review of MSDS documents before use can prevent problems.

Dusts are an additional toxic concern in confined spaces. Because of the small spaces involved, operations such as sandblasting, grinding, and cleaning can create high employee exposures to dusts. Some of these materials also contain toxic materials such as silica or heavy metals. Use additional ventilation or modify the work procedure to reduce dust levels as much as possible.

Industrial hygiene monitoring may be needed to assess the hazards and determine the proper protective procedures and equipment required.

If you think that toxic gases or dusts may be a problem in confined spaces you are working in - contact your Headquarters or District Safety Office for assistance.

#### 4) Poor Ventilation

Confined spaces generally require four air changes per hour to maintain a safe atmosphere. If natural ventilation is not sufficient, then mechanical ventilation systems, either built-in or portable, must be provided. [As a general rule, if you can feel the air movement on your face, the natural ventilation is probably sufficient but testing the air is the only way to be sure.]

**NOTE: Air monitoring is required in all cases before confined spaces are entered. DO NOT RELY ON VENTILATION ALONE FOR PROTECTION.**

If mechanical ventilation is required, only approved equipment will be used. Makeshift fans and blowers are not acceptable. **Never use compressed air or welding oxygen to ventilate confined spaces.** Portable blower fan units should be capable of circulating at least 1200 cubic feet per minute (CFM) and be equipped with a flexible hose long enough to reach the bottom of the confined space and/or the work area.

Always ventilate by blowing air into the space. Place the air discharge hose near the bottom of the space, so that air freely circulates to all corners. This is much more effective than drawing contaminated air from the space. Be sure an opening is provided to allow air to escape. Beware of "short circuits" that allow air to enter and escape without circulating. Position the blower fan intake so that vehicle exhaust gases or other contaminants are not blown into the space. Position the hose to minimize bends and kinks, which can increase resistance and reduce airflow.

Monitor the air before ventilating to determine if air contamination exists and to check the space's "natural" state. If contaminants are present, ventilate the space for at least 15 minutes. This should provide ample circulation to flush contaminants from the space.

Retest the air to ensure that contaminants are controlled. Continue the ventilation and testing as needed to ensure a hazardous condition does not develop. Ventilation is always recommended in confined spaces, even if air contaminants are not detected.

**IN ALL CASES, AIR MONITORING WILL BE CONDUCTED BEFORE THE CONFINED SPACE IS FIRST ENTERED.**

Additional monitoring may be waived if conditions inside and outside the space do not change. (This is possible only if operations inside the space do not use or generate hazardous substances.)

If operations that consume oxygen (welding, burning, heating, etc.) or produce contaminants (painting, cleaning, grinding, sandblasting, shotcreting, etc.) will be done in or near the confined space, additional ventilation beyond four (4) air changes per hour may be required to control the hazard.

Hot operations, particularly welding or cutting on coated metals (galvanized or painted) require additional ventilation equipment to remove the smoke and fumes from inside. (This is in addition to the ventilation equipment pushing air into the space.)

## **b) PHYSICAL HAZARDS**

Physical Hazards are the second category of unique confined space hazards that require special training, work procedures, and equipment. Physical hazards include the following:

- **Difficult Entry/Exit**

By definition, entry into confined spaces is difficult. Entry/exit openings are usually small in size and difficult to move through easily. Movement within the space is typically difficult with small openings, vertical ladders, small landings, and multiple levels. Movement of employees or equipment in and out of these spaces is difficult, particularly if an employee is injured.

Special training, equipment, and safety devices are required to perform rescues from confined spaces. Because Caltrans employees are typically not trained or supplied with this equipment, coordination with local fire departments and rescue squads is essential.

Knowing how the local fire department or rescue squad will respond to a confined space emergency is a required part of the planning for a confined space entry. Discuss notification procedures and confined space locations with rescue agencies before the work begins.

The name and contact information for the rescue provider must be immediately available at all confined space operations. If the local fire department or rescue squad cannot provide emergency rescue service, alternate methods such as a contract with a rescue service provider or Caltrans rescue team must be provided.

These alternative rescue services will be reviewed and approved by the Headquarters or District Safety and Health Office before they are implemented.

Note: Emergency confined space rescue requires specialized rescue equipment and training, including frequent drills and periodic retraining.

- **Communication**

An additional concern related to the difficult entry/exit of confined spaces is communication between those in the confined space and those outside.

A system of communication, such as two-way radio, verbal signals, hand signals, rope pulls, etc., must be established and understood by all participants before entering the space.

- **Insects/Birds/Rodents**

Because they provide an ideal natural habitat, confined spaces often contain insects, birds, rodents, spiders, snakes, and other animal life. Many of these creatures can inflict painful bites or carry harmful diseases, so avoiding contact with them and their droppings is the best procedure. Use insect sprays or mechanical means to remove them from the area, but **be aware that insect spray may create a toxic atmosphere**. Use work practices/methods that minimize airborne dust. Do not handle dead rodents, birds, or rodent/bird droppings with bare hands, as they may be a source of disease or virus. Use coveralls to avoid contaminating clothing. Be sure to wash hands and face before eating, drinking, or smoking.

- **Lighting**

Because of their configuration, confined spaces usually have poor lighting and visibility. Extra illumination is usually required to perform work inside confined spaces. Lights used in confined spaces must be grounded and suitable for wet locations with the bulb protected against breakage. Lights must be explosion proof unless air testing is provided. **Never turn on a light or electrical device in a confined space until the air has been tested.**

- **Wet Conditions, Slips, Trips, and Falls**

Confined spaces can involve wet conditions and uneven working surfaces. Mud and debris may hide drop offs, slopes, protruding pipes and valves, or other slip, trip, and fall hazards. Footing can be uncertain. Always proceed cautiously with good illumination. Wear appropriate footwear to prevent contact and minimize slipping.

- **Ladders**

An additional source of slip, trip, or fall hazards is ladders. Ladders are often the only means of access into confined spaces. Always climb ladders properly: face the ladder, use both hands, do not carry materials or equipment, rest at landings if tired.

- **Floors/Manhole Openings (Access openings)**

Entry into confined spaces often requires the removal of covers, grates, or manhole covers to gain access. If employees or equipment can fall into or through the access opening, portable guardrails or equivalent barriers shall be used to guard the opening.

- **Equipment (Lockout/ Tagout)**

Equipment located inside confined spaces can create special hazards, particularly if it is controlled from a remote location. Unexpected movement or actuation of valves, pipes, solenoids, actuators, fans, shafts, motors, pumps, or other equipment inside the space while workers are in the area could cause serious injury.

If unexpected movement or start-up would be a danger to employees, the equipment that moves or could move must be positively locked-out, de-energized, blocked, secured, and or guarded to prevent employee contact. Locations that remotely control the equipment must be notified before work starts and positive steps must be taken to prevent accidental activation.

- **Heat Stress**

Because of the unique conditions of working inside confined spaces, heat stress can be a problem. Be aware of the three stages of heat stress:

- Heat Cramps - cramping in legs and arms, heavy sweating-caused by lack of minerals in the muscles. Treatment: drink fluids, rest.
- Heat Exhaustion - fatigue, nausea, headache, heavy sweating, skin clammy and moist, pale or flush complexion, blood pressure drop, fainting-caused by continued exertion and diversion of blood supply to skin and muscles. Treatment: seek medical attention, move to cooler place, drink fluids, rest.
- Heat Stroke - confusion, loss of consciousness, convulsions, hot dry red skin, no sweating-MAY BE FATAL IF UNTREATED - SEEK IMMEDIATE MEDICAL HELP. Treatment: immersion/sprinkle with cool water, but do not "ice down" - that may send victim into shock.

To avoid heat stress, prepare properly through physical conditioning, acclimatizing to heat, and awareness of symptoms. During work drink plenty of fluids (1 qt. per hour), take cooling off breaks, and avoid alcohol and caffeine.

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### **14.05 ROLES AND RESPONSIBILITIES**

The District or Headquarters Safety and Health Officers are responsible to oversee the program and to ensure standardized training is given on a regular basis and that qualified trainers and instructors are available. They shall:

- Ensure that managers, supervisors, and employees follow the requirements for confined space entry as required by this chapter.
- Ensure that information about proper testing equipment is made available to managers and supervisors.
- Ensure that employees have received proper training.

The supervisor; i.e., branch chief, shop superintendent, and maintenance manager, or other appropriate position, is responsible to:

- Ensure that confined spaces in their area of responsibility are identified and recognized by employees.
- Ensure that all affected employees are trained in accordance with the instructions contained in this chapter before entering a confined space.
- Ensure that proper testing equipment is purchased and made available to supervisors and employees.
- Ensure that employees know how to use test equipment and test for hazardous gases/oxygen deficiencies in confined spaces.
- Ensure that employees understand applicable safety procedures.
- Maintain applicable records and entry forms.
- Ensure that employees know the rescue procedures.
- Ensure that required rescue services are provided/available.



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In addition to the items listed above, the following roles and responsibilities will be designated and followed at all confined space entry operations.

The on-site person supervising the confined space entry (**entry supervisor**) shall:

- ensure that all required testing equipment is on-site and operating properly;
- ensure that all crew members know the possible hazards and the means, symptoms, and effects of exposure;
- verify that the confined space entry form is properly filled out;
- ensure that all required air monitoring has been done, and all confined space procedures are being followed, before signing the entry form and allowing entry to begin;
- terminate the entry when the work is completed or if conditions arise which endanger the entrants;
- verify that rescue services are available and required means of communication are operable;
- remove unauthorized people from the site and prevent their entry into the confined space; and,
- ensure that someone else will assume their duties if they must leave the site.

The lookout person (**attendant**) at the confined space entry shall:

- know the possible hazards, and the means, symptoms, and effects of exposure;
- be aware of the possible behavioral effects of exposure on entrants;
- continuously track the number and identity of the employees in the confined space;
- remain outside the confined space until relieved;
- communicate with entrants to monitor their status and alert them, if necessary, of the need to exit;

- monitor activities both inside and outside the confined space and order entrants to exit if: a prohibited condition is detected, entrants experience behavioral effects, something happens outside the space that could endanger entrants, attendant cannot fulfill his/her duties;
- start on-site rescue procedures (**without entry**) and/or summon additional help if needed;
- keep unauthorized individuals away from the confined space and notify the entry supervisor and entrants if the individuals enter the confined space;
- perform no duties that might interfere with their primary duty to monitor and protect entrants.

NOTE:

The “entry supervisor” and the “attendant” may be the same person.

All employees who will enter confined spaces (**entrants**) shall:

- follow the work procedures received during training, and as outlined in this chapter;
- use and handle the testing equipment properly;
- know the hazards, including means, symptoms, and effects of exposure;
- communicate with the attendant (lookout person) as necessary;
- alert the attendant whenever a prohibited condition, or any warning sign or symptom of dangerous exposure occurs;
- exit the confined space immediately whenever ordered to by the attendant or entry supervisor, or whenever a prohibited condition, or any warning sign or symptom of dangerous exposure occurs, or when an evacuation alarm is activated;
- follow appropriate rescue procedures; and,
- notify their supervisor of any safety concerns or questions.

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## 14.06 TRAINING REQUIREMENTS

Before starting any work involving confined spaces, employees shall be trained in the following items:

- the Caltrans Confined Spaces Program contained in this chapter;
- the Caltrans confined spaces operating procedures described in the following section;
- the Caltrans Hazardous Materials Communication Program (See Chapter 16 in the Safety Manual); and
- the roles and responsibilities of confined spaces workers.

Confined spaces training will be provided by designated trainers who have completed a "train the trainers" course. Completed training will be documented, and recorded on the employee's training record. The designated number is G#21418.

Training will be provided before employees are allowed to enter a confined space and renewed every two years thereafter.

\* \* \* \* \*

## 14.07 OPERATING PROCEDURES

The following are the Caltrans Confined Space Operating Procedures. These are the basic requirements that must be followed by all supervisors and employees before entry into a confined space is allowed.

### 1) PLANNING

Before starting any work involving a confined space:

Employees will be trained on:

- the elements listed in Section 14.06 - TRAINING, above;
- the roles and responsibilities of confined space **entry supervisors, attendants, and entrants**;
- the specific physical hazards of the space to be entered;
- the hazards of the materials to be used in the space, including symptoms of over exposure;
- the entry and exit procedures;
- how emergency/rescue requirements will be satisfied [See Section 14.04(b) Physical Hazards - Difficult Entry] on page 14-10, and the name and contact information for the responders for that location; and,
- the proper use of air monitoring equipment.

All necessary safety, first aid, and monitoring equipment will be on the job site, and all necessary rescue equipment will be on the job site unless provided by the rescue responders.

The confined space work crew will coordinate with other crews working in the area (highway maintenance, surveys, construction) about their work location and schedule.

## 2) ENTRY PROCEDURE

Before entering a confined space:

- identify the role and duties of each employee: **entry supervisor, attendant, and entrants;**

*EXCEPTION for Attendant:*

*The requirement for an “attendant” may be waived if all of the following conditions are satisfied:*

- 1. Continuous air monitoring will be conducted during entry and while inside.*
  - 2. No hazardous materials will be used/generated/placed in the confined space.*
  - 3. No outside sources of hazardous materials that could cause an inside problem.*
  - 4. A means of communications with rescue services exists.*
  - 5. Documentation of these conditions is made at the worksite.*
  - 6. The confined space is: above ground level, or a culvert 60 inches or more in diameter that the entrant can see and walk through.*
- review the operating procedures and the work to be done, including hazards and symptoms of overexposure;
  - review how communication between entrants and attendants will be maintained;
  - review the emergency/rescue procedures [See Section 14.08(b) Physical Hazards - Difficult Entry] and the name of the rescue response agency and directions on how to contact them shall be understood and posted at the worksite;
  - verify communications with radio dispatcher, office, local agency, or other emergency rescue contact;
  - assure that air monitoring equipment has been properly maintained and calibrated, field tested, and that batteries are fully charged (or have extra batteries);

- 
- prevent hazardous materials or vapors from entering the confined space through pipelines, drains, gutters, automatic fire suppression systems, etc., while work is being done;
  - take appropriate steps to ensure that equipment inside the space will not start or move suddenly and that workers in the space will be protected from it; this includes notifying remote locations that control the equipment; and
  - test the air in the confined space with appropriate air monitoring equipment to determine whether dangerous air contamination, oxygen deficiency, and/or flammability hazards exist.

NOTE:

Monitoring requirements may be modified after initial entry if outside/inside conditions do not change and the work does not use or generate hazardous substances. IN ALL CASES, AIR MONITORING WILL BE CONDUCTED BEFORE THE CONFINED SPACE IS FIRST ENTERED.

- flush and/or purge the confined space with a mechanical ventilation system for at least 15 minutes if atmospheric hazards are detected;
- retest the air to ensure that contaminants have been removed; and/or
- **IF TESTING SHOWS THAT THE AIR IN THE CONFINED SPACE IS STILL HAZARDOUS, TRY REVENTILATING AND RETESTING. IF THE AIR STILL TESTS HAZARDOUS - STOP - DO NOT ENTER – NOTIFY THE ENTRY SUPERVISOR \***

\* NOTE:

If entry must be made in hazardous air conditions, special equipment and training are required. Written approval must be obtained from Headquarters/District Safety and Health Office before entry is allowed.

- 
- Document that safe work procedures (including air monitoring) are being followed at the worksite by recording:
    - names of each entrant,
    - name of attendant,
    - name of entry supervisor,
    - date and time of each entry and exit,
    - record of initial % of oxygen,
    - record of initial % Lower Explosive Limit value,
    - record of periodic meter readings or notation that continuous monitoring was used, and
    - record of initial ppm readings for Carbon Monoxide/Hydrogen Sulfide (if applicable).

NOTE:

Caltrans personnel will use the "CONFINED SPACE ENTRY FORM", formerly "PERMIT FOR CONFINED SPACE ENTRY", to satisfy the written record requirements. (See Section 14.13 of this chapter.)

**3) DURING WORK IN A CONFINED SPACE:**

- Provide continuous ventilation while employees are in the confined space;

Exception:

*Those locations where air monitoring indicates no hazard and the work inside the space does not use or generate hazardous substances, and outside/inside conditions do not change.*

- Provide continuous air monitoring and log the results.

NOTE:

Monitoring requirements may be modified if outside/inside conditions do not change and the inside work does not use or generate hazardous substances.

- 
- **IF AIR BECOMES HAZARDOUS -IF ALARM SOUNDS - GET OUT IMMEDIATELY! DO NOT REENTER - NOTIFY ENTRY SUPERVISOR\***

**\* NOTE:**

If entry must be made in hazardous air conditions, special equipment and training are required. Written approval must be obtained from Headquarters/District Safety and Health Office before entry is allowed.

- maintain communication between the entrants and the attendant;
- ensure that suitable lighting is provided in the confined space;
- ensure that equipment within the space remains de-energized, disconnected, locked, blocked;
- ensure that floor/manhole openings are guarded so entrants or equipment can not fall into opening; and
- do not allow ignition sources in the confined space. (Smoking is prohibited.) If torches, burners, welders, etc., must be used, additional protective measures, including local exhaust ventilation, fire control procedures, and equipment, monitoring, and training must be provided, and documented.

(Contact the Headquarters/District Safety and Health Office for assistance in meeting these requirements.)

**NOTE:**

*The procedures in this section are the minimum requirements and must be provided to all Caltrans employees engaged in confined space work on any project.*

*Required procedures may be provided by a contractor or others depending upon the operation and/or jurisdiction.*

*Copies of this chapter may be given to others, but, Cal-OSHA regulations require that each employer working in confined spaces have their own written procedures and a confined space program.*



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#### **14.08 EMERGENCY/RESCUE PROCEDURES**

Because Caltrans employees will not enter confined spaces with hazardous atmospheres, the most probable emergencies to be encountered will be slips, trips, falls, heat stress, cuts, chemical exposure, or heart attack/seizure. Generally, these emergencies will be handled in the same manner as non-confined space emergencies.

If the employee is incapacitated and cannot leave the confined space without special rescue assistance, follow the rescue plan prepared before entry began. See Section 14.04(b) Physical Hazards - Difficult Entry/Exit, on page 14-10, and Section 14.07(1) Planning, on page 14-17.

While waiting for rescue services to arrive, carry out the following procedures:

- 1) Entrants will provide first aid to the injured employee and notify the attendant of the emergency.
- 2) Attendant will notify entry supervisor and initiate emergency rescue procedure by notifying rescue agency.
- 3) Attendant will not enter the confined space or leave the scene unless another attendant assumes his/her duties.
- 4) The injured person will not be moved unless they are in a life threatening situation.
- 5) Move ventilation source to near the injured person and maintain verbal and visual contact with them.
- 6) Continue to monitor the conditions inside and outside the confined space, including air monitoring inside the space, until rescue services arrive.

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## **14.09 WET/DRY PIT PUMPING PLANTS**

Wet pit pumping plants generally have the electrical motors and electrical control equipment located at ground level (motor room floor). The pumps are located in the pit below the ground level and are controlled from above. Access to the pump pit is by ladders and landings.

Because the pumps are placed directly into the open water collection chamber (the wet pit), these plants usually rely on natural ventilation coming through the collection chamber. Because the potential exists that hazardous materials could enter the open chamber through the drainage system, it is essential to do air monitoring before pumps, motors, or lights are turned on.

Dry pit pumping plants generally have electrical control equipment located on the balcony or at ground level. The pumps and motors are located in the dry well below the electrical equipment floor or balcony. Access to the pumps and motors is by ladders and landings.

Because the pumps are separated from the collection chamber by a wall, these plants have little natural ventilation and are usually equipped with a mechanical ventilation system. A leaking or defective pump could allow hazardous materials that get into the collection chamber to enter the dry pit, with the possibility that a hazardous atmosphere could be created. Air monitoring is required before lights, motors, or pumps are turned on.

Both wet and dry pit pumping plants may have locations that have good access, and therefore do not meet the definition of a confined space.

These areas may be entered without air testing, but because of the potential for hazardous atmospheres at the below grade (pit) locations, monitoring below grade must be done before pumps, motors, or lights are turned on (unless the motors and lights are explosion proof).

The areas below the motor room floor are confined spaces and will not be entered without air testing.

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**14.10 GASOLINE OR DIESEL POWERED EQUIPMENT IN CONFINED SPACES**

The use of gasoline or diesel powered equipment in confined spaces creates special hazards and has special requirements.

Engine powered equipment such as generators, welders, drills, saws, pumps, tunnel tugs, etc., generate exhaust gases that contain carbon monoxide and other harmful materials. They must not be used in confined spaces unless special precautions and protective measures have been implemented.

It is essential that exhaust gases be piped or removed from the space, and that good ventilation and continuous air monitoring (particularly for carbon monoxide) be provided. The usual (4) four air changes per hour may not provide adequate protection.

The entry supervisor shall document the special measures taken to address the hazards before he/she allows engine powered equipment to be used in the space.

\* \* \* \* \*

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**The following section covers Gasoline or Diesel Powered Equipment Used in Confined Spaces During “Tunnel” Operations.**

Operations involving the cleaning, repair, or construction of large pipes or culverts that personnel and equipment can enter could be considered “tunnel” work based on Cal-OSHA regulations.

Whenever Caltrans is required to conduct "tunnel" operations, they must comply with the following regulations, or hire a contractor who must comply with the following regulations:

- 1) Have a pre-job meeting with the Cal-OSHA Mining and Tunneling Unit to have the "tunnel" classified and review the safety requirements.
- 2) Obtain an underground operation permit from Cal-OSHA for each machine used in the tunnel.

Equipment must be diesel powered and equipped with approved catalytic converters or exhaust scrubbers.

Gasoline powered equipment is generally prohibited, unless sufficient ventilation is provided.

NOTE:

*As a public agency, Caltrans is exempt from this permit requirement.  
Contact the Headquarters or District Office of Safety and Health for assistance.*

- 3) Provide a ventilation system that meets the capacity requirements based on brake horsepower of equipment and number of workers in the tunnel.
- 4) Provide trained "gas testers" to monitor the air inside the tunnel at regular intervals.
- 5) Have an acceptable written safety program.

NOTE:

*The five (5) above listed requirements do not apply to Caltrans operations at the Posey/Webster Tubes or the Caldecott Tunnels.*

### 14.11 AIR MONITORING EQUIPMENT SELECTION

The criteria given below are based on the assumption that the air monitoring equipment has been properly maintained and calibrated. Alarms must be set to activate at 19.5 percent for oxygen and 10 percent for lower explosive limit (LEL). Carbon monoxide and hydrogen sulfide alarms shall be set at 35 ppm and 10 ppm, respectively (unless set at a lower level by the manufacturer). Monitoring equipment that cannot be set at these levels or that is not operating properly cannot be used.

To aid Caltrans employees in selecting the correct air monitoring equipment for confined spaces, the following criteria will be used:

- 1) air monitoring equipment that monitors only oxygen and flammable gases (standard two gas units) can be used:
  - if the location has good ventilation (natural or mechanical); and
  - carbon monoxide and/or hydrogen sulfide are not expected (i. e.; large open culverts, ventilation tunnels, drop inlets, etc.); and
  - there are no previous indications that additional toxic materials may be present; and
  - the work being done and materials being used inside the space cannot create or release toxic air contaminants.

NOTE:

**If workers experience symptoms of exposure, work will stop until the cause is determined. Air monitoring for additional toxic air contaminants may be required.**

- 2) air monitoring equipment that monitors for carbon monoxide, in addition to oxygen and flammable gases, will be used:
  - in locations with poor ventilation; or
  - where carbon monoxide would be expected (bridge cells, tunnels, pump houses, etc. - especially when motorized equipment or vehicles are operated nearby); or

- 
- in locations where carbon monoxide has been detected in the past; or
  - in locations where work done inside the space (burning, welding, brazing, heating, cutting, etc.) could create carbon monoxide; or
  - if workers inside the space experience symptoms of exposure to carbon monoxide (headache, dizziness, weakness, drowsiness, nausea).
- 3) air monitoring equipment that monitors for hydrogen sulfide, in addition to oxygen and flammable gases, will be used:
- in locations with poor ventilation; or
  - in locations where hydrogen sulfide would be expected (pump houses, sewer/drainage lines, drainage storage chambers, sumps, blocked or obstructed culverts, etc.); or
  - in locations where hydrogen sulfide has been detected in the past; or
  - in locations where employees working inside the space may release hydrogen sulfide (opening sealed sewage/drainage lines or pumps, disturbing decaying organic matter inside chambers, culverts, or pipes, entering septic tanks or clarifiers, etc.); or
  - if workers inside the space experience symptoms of exposure to hydrogen sulfide (eye irritation, drowsiness, strong "rotten egg" smell).
- 4) locations that do not meet the criteria given above shall be monitored for carbon monoxide, hydrogen sulfide, oxygen and flammable gases before entry.

SPECIAL NOTE:

THE OFFICE OF SAFETY AND HEALTH STRONGLY RECOMMENDS THAT ALL NEW MONITORING EQUIPMENT BE PURCHASED EQUIPPED WITH ALL FOUR SENSORS, TO ALLOW ITS USE IN ALL CALTRANS CONFINED SPACES.

## **14.12 AIR MONITORING INSTRUMENTS**

Caltrans generally uses four (4) types of sensors in its air monitoring instruments for confined spaces: Combustible Gas Indicator (CGI or LEL meter), Oxygen Level Meter, Carbon Monoxide Sensor, and Hydrogen Sulfide Sensor.

### **Combustible Gas Indicator (CGI or LEL meter)**

This sensor measures for the presence of flammable vapors in the air giving a reading as a percentage (%) of the lower explosive limit (LEL). It is not gas specific and measures only for the combustibility of the tested air.

Because combustibility depends on oxygen levels, this sensor operates properly only at oxygen levels above 19.5 % and below 23.5 %. Low oxygen levels will cause an artificially low LEL reading, while high oxygen levels will cause an artificially high LEL reading. The alarm on this type of sensor will activate at 10% of the LEL.

CGI's are calibrated to the calibration gas recommended by the manufacturer (generally methane gas). Lead gasoline and silicone vapors can "poison" the sensor and cause incorrect readings or failure. Excessive saturation of the sensor with high LEL exposures will shorten sensor life. CGI sensors usually last at least two (2) years.

### **Oxygen Level Meter**

This sensor indicates the oxygen level in the air giving a reading of the percent (%) of oxygen in the air. The alarm on this instrument will activate at oxygen levels less than 19.5% or more than 23.5 % oxygen. Oxygen sensors have a limited life span, typically 12-18 months, and should be replaced as recommended by the manufacturer. (Some new models are guaranteed to last 24 months.)

#### NOTE:

The life span of oxygen sensors begins when the sensor is manufactured, so maintaining a large stockpile of additional sensors may not be advisable.

### **Other Sensors**

Carbon monoxide and hydrogen sulfide sensors measure the concentration of these materials in the air and give the results in parts per million (PPM). The carbon monoxide alarm is set at 35 ppm, the hydrogen sulfide alarm at 10 ppm. These are the Cal-OSHA Permissible Exposure Limit (PEL) for these particular materials, but some manufacturers set the alarm lower. (They typically have a life span of 18-24 months and should be replaced as recommended by the manufacturer.)

## Calibration

To ensure that air monitoring instruments are operating properly, they must be calibrated and tested regularly. Calibrations are divided into two types:

- 1) **"field"** calibration or function test - Done on a daily basis, or each time the instrument is used, to check that the sensors are functioning properly:

- A "breath test" with exhaled air to test the oxygen meter (exhaled air is low in oxygen);
- A "lighter test" with a butane lighter or calibration gases to check the CGI; and/or

**CAUTION:** Do not overexpose the sensor! This will cause premature sensor failure.

- A "challenge test" of other sensors with their calibration gas or a "bump" gas (if available) .

- 2) **"bench"** calibration - A calibration and adjustment of the instrument sensors performed at least monthly (or before each use if not at least monthly). This calibration must be done according to manufacturer's recommendations and by a trained person. Calibration gases are used for this procedure, which includes adjusting meter responses and checking alarm settings. (Sensors that require large adjustments during calibration probably are near the end of their useful life.)

### **NOTE:**

**Air monitoring instruments that cannot be or are not calibrated, or that do not pass the above tests, shall not be used. They shall be removed from service until repaired.**

Records indicating calibration dates, repairs, sensor changes, and maintenance of each instrument shall be maintained with the instrument.

Calibration and/or operation is dependent on the condition of the instrument's batteries. Batteries should be checked before calibration/use.



### **14.13 DOCUMENTATION - CONFINED SPACE ENTRY FORM**

To ensure that confined space procedures are being followed and to provide a record of confined space entries, it is essential that all entries into confined spaces be documented.

Caltrans personnel will use the "CONFINED SPACE ENTRY FORM", formerly known as the "PERMIT FOR CONFINED SPACE ENTRY" to document their confined space entries. This form shall be filled out and signed by all work crew members before any work begins and before entering a confined space.

The required entries include:

- names of entrants (employees),
- names of attendants(s) (lookout personal),
- name of entry supervisor,
- date and time of each entry and exit,
- record of initial % of oxygen,
- record of initial % Lower Explosive Limit (LEL) value,
- record of periodic meter readings or notation that continuous monitoring equipment was used, and/or
- any other relevant information.

The confined space entry supervisor is responsible to ensure that this documentation occurs. (In locations where a joint Caltrans - contractor entry takes place, the Caltrans employee will obtain copies of the contractor's completed entry form, or record the information on an equivalent form for Caltrans records purposes.)

The supervisor of the confined space work crew shall notify any other crew working in the area (such as highway maintenance, surveys, construction) of their work location and work schedule before entering the confined space.

The "CONFINED SPACE ENTRY", Form PM-S-0040A and B, is a bright yellow 5 inches X 8 inches card. A sample of the card is included at the end of this chapter.

NOTE:

THE COMPLETED ENTRY FORM (or equivalent) MUST BE AVAILABLE AT THE CONFINED SPACE WORKSITE BEFORE THE WORK BEGINS. THE SUPERVISOR SHALL EXPLAIN THE INFORMATION ON THE CARD TO EACH EMPLOYEE BEFORE ENTRY.

**Supervisors shall retain the entry form for one (1) year.**

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#### **14.14 REQUIREMENTS FOR CONTRACTORS**

If contractors are required to work in a Caltrans confined space, provisions shall be made to notify the contractor:

- 1) that the space may contain hazardous atmospheres and that a confined space entry program is required;
- 2) the nature of the hazardous atmosphere, if known, and all other information about the space known to Caltrans;
- 3) any precautions or procedures instituted by Caltrans for worker protection in or near the space ;
- 4) coordinate entry procedures with the contractor if Caltrans employees will be working in or near the space; and,
- 5) apprise the contractor of the need for a debriefing with Caltrans about the confined space after the contractor has completed their work in the space. The briefing will focus on hazards encountered or created by the contractor while working in the space.

NOTE:

The information gathered at the contractor de-briefing will be recorded and passed on to the supervisors of Caltrans employees who may enter the space at a latter time.

The Resident Engineer or contract administrator/supervisor of the job is responsible to ensure that the above requirements are complied with.

\* \* \* \* \*

## **14.15 CONFINED SPACE GUIDELINES - A QUICK REVIEW CHECKLIST**

### **Is it a Confined Space?**

- people can enter
- difficult access/egress
- not for continuous occupancy

### **Training?**

- roles and responsibilities
- hazards
- procedures
- instruments

### **Before you start**

- nearest medical facility
- rescuers
- air monitoring equipment - "field calibration"
- do we know what's going on inside (hazmats or processes)
  - If hazmats/processes - Do we know what to do?
  - If you don't know - Don't go, Stay out!
- going on outside (exhaust [CO], hazmat processes)?
  - If hazmats/processes will effect inside, Stay out!
- does someone know we're entering (check in - check out)?

### **Entering**

- has air been tested?
  - unknown - test
  - known (recent) and no changes/hazmat - don't need to retest
  - known but changes/hazmat - test
- NOTE: initial test even with ventilation to verify effectiveness
- WRITE IT DOWN! - use "Confined Space Entry Form"
- maintain communications with someone outside
- have conditions changed?
  - odors, smells, symptoms, alarms, spills, injury, illness - inside
  - accidents, spills, fire - outside

### **IF CONDITIONS CHANGE, GET OUT! - REEVALUATE BEFORE REENTRY**

### **After the entry**

- let someone know you're out
- debrief with contractor (if appropriate)
- pass appropriate information on to those who are affected
  - maintenance, construction, other inspectors
- keep record of entry (one year)

### **Questions?**

- Review contents of this chapter
- call District or Headquarters Safety and Health Office
- call Construction Safety Coordinators

**CONFINED SPACE ENTRY FORM****FORM PM-S-0040A (SIDE A)**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**CONFINED SPACE ENTRY CHECKLIST**  
PM-S-0040A (REV. 5/1998)

**FORM AUTHORIZED FOR ONE SHIFT ONLY**  
**NEW FORM MUST BE COMPLETED FOR EACH SUBSEQUENT SHIFT**

*This form must be readily available at the confined space during the time work is in progress. After work is completed, give to your supervisor for retention.*

DESCRIBE WORK TO BE DONE

DATE AUTHORIZED	TIME AUTHORIZED
	FROM TO

LOCATION OF CONFINED SPACE

LOCATION OF WORK WITHIN CONFINED SPACE (DRAW SKETCH BELOW, ESTIMATE AND SHOW DISTANCE AND DIRECTION FROM WORK ACCESS)

# Sample

<b>PRE-WORK APPROVAL</b>	CREW SUPERVISOR'S SIGNATURE	DATE (Must be signed on date of issue)
<b>CONFINED SPACE ENTRY APPROVAL</b>	ENTRY SUPERVISOR'S SIGNATURE	DATE (Must be signed on date of issue)
<b>EMPLOYEES AUTHORIZED TO ENTER CONFINED SPACE</b>		
ENTRY SUPERVISOR		
LOOKOUT PERSON/ATTENDANT		
ENTRANTS		

CHECKLIST ON OTHER SIDE MUST BE COMPLETED BEFORE ENTRY

**CONFINED SPACE ENTRY CHECKLIST****FORM PM-S-0040B (SIDE B)****CONFINED SPACE ENTRY CHECKLIST**

PM-S-0040B (REV. 5/1998)

NOTE: THE ENTRY SUPERVISOR INITIALS ITEMS 1-3 AND 5-7. ENTER SPACE ONLY AFTER THE PROCEDURES LISTED BELOW HAVE BEEN COMPLETED.

**INITIAL**

1. Review *Code of Safe Practices* for entry and work in confined spaces. \_\_\_\_\_
2. Review emergency/rescue procedures. Ensure emergency rescue equipment/personnel are available for removing disabled worker from space. \_\_\_\_\_
3. Assure that confined space has adequate ventilation. \_\_\_\_\_

4. Atmospheric testing	ENTRANCE		INSIDE	
	METER READING	INITIAL	METER READING	INITIAL
% Oxygen				
Combustibles (%Lower Explosive Limit - LEL)				
Carbon Monoxide				
Hydrogen Sulfide				

NOTE: If the atmosphere tests hazardous, **STOP - DO NOT ENTER**; contact entry supervisor. Hazardous is defined as oxygen level below 19.5%, or a combustible gas content greater than 1% LEL, or carbon monoxide greater than 25 ppm, or hydrogen sulfide greater than 10 ppm.

**INITIAL**

5. Suitable lighting provided in work area. \_\_\_\_\_
6. Effective means of providing continuous communication between standby person and worker(s) in confined space. \_\_\_\_\_
7. Assure that atmosphere will be tested during work within confined space.  
NOTE: If atmosphere becomes hazardous, all workers shall **STOP WORK** and **LEAVE CONFINED SPACE IMMEDIATELY - DO NOT RE-ENTER**; contact entry supervisor. \_\_\_\_\_

I have determined to my satisfaction that the above procedures have been completed and it is safe to enter and work in this confined space.

ENTRY SUPERVISOR'S SIGNATURE \_\_\_\_\_

LOOKOUT PERSON/ATTENDANT'S SIGNATURE \_\_\_\_\_

INITIALS OF OTHER WORKERS/ENTRANTS ENTERING CONFINED SPACE


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## PUMP HOUSE MAINTENANCE

### HAZARD REVIEW

Explosive Hazards  
Oxygen Deficient Atmosphere  
Footing and Falling Hazards

### SAFE OPERATING PROCEDURES

1. Review safe practice rules for applicable equipment (including rental equipment), perform pre-operational checks and review Confined Space Entry Procedures (see Appendix B).
2. Do not go below floor level prior to notifying Area Supervisor or Area Superintendent, and the local dispatcher.
3. Before entering a confined space, a "Confined Space Pre-Work Check List" shall be posted at the work site and must be completed and signed by all employees involved in entering the confined space before entry into the confined space.
4. All employees, including standby persons, shall be trained in the operating and rescue procedures, including instruction as to the hazards they may encounter.
5. Employees entering confined spaces should be in good physical condition and psychologically suited for the job.
6. At least one person shall stand by on the outside of the confined space ready to give assistance in case of emergency.
7. Smoking or open flames shall not be permitted in any area of the structure. "No Smoking" signs shall be posted on all exterior doors of the pump house. If cutting or welding is required, remove the object to outside area, if possible. If removal is not possible, remove all grates, manhole covers and set up mechanical ventilation to provide maximum ventilation in the work area. Respiratory protection may be required.
8. The area shall be ventilated for a minimum of 15 minutes prior to atmospheric testing and entry. Pumping plants with wet pits need not be ventilated if the crew leader determines that the updraft of air is sufficient to indicate the natural ventilation system is functioning and the atmosphere required tests are satisfactory.
9. Atmospheric tests must be conducted by a trained and qualified person prior to any employee descending below the entry level of the pump house. If it is determined from the initial test, that the lower explosive level and oxygen levels are within acceptable and legal standards as mandated in Article 108 of the General Industrial Safety Orders, Title 8, California Code Regulations, then entry below the main floor may proceed. The air shall be continually monitored with an appropriate instrument for combustible gases and oxygen-deficient atmosphere. A record of such tests shall be kept at the job site. **Should the atmospheric-testing instrument's audible alarm or visual indicator indicate a change, all individuals must evacuate the area immediately.**
10. Atmospheric detection instruments shall be stored at Supervisor, Area Superintendent, and Region Manager's office. These shall be certified annually and checked before each use. Detection instruments not operating properly shall not be used.
11. During the initial testing of structure for atmospheric conditions, all employees must remain at floor level.
12. A radio-equipped vehicle must be at the location when an employee(s) will be below the floor level. The radio shall be checked with local dispatcher for communication capabilities at the location.
13. One person must remain at floor level at all times, and visual or verbal communication must be constantly maintained with employee(s) below the floor level.
14. **WRITTEN EMERGENCY RESCUE PROCEDURE MUST BE LOCATED IN PUMP HOUSE AND AT THE LOCAL DISPATCH OFFICE READILY AVAILABLE AT ALL TIMES. THE STAND-BY PERSON (S) SHALL FOLLOW THE WRITTEN EMERGENCY RESCUE PROCEDURES.**
15. Notify the local dispatcher when all work below floor level has been completed and all employees have safely returned to floor level.
16. If the above conditions cannot be obtained, no one shall enter the confined space.

## APPENDIX B

### CONFINED SPACE ENTRY PROCEDURES

**CONFINED SPACES INCLUDE STRUCTURES OR FACILITIES, SUCH AS: TANKS, BINS, CULVERTS, MOBILE TANKERS, VAULTS, PUMP HOUSES, DEEP TRENCHES, BRIDGE CELLS, OR SIMILAR LOCATIONS.**

### HAZARD REVIEW

Explosive Hazards  
Oxygen deficient atmosphere

### SAFE OPERATING PROCEDURES

1. All employees, including standby persons, shall be trained in the operating and rescue procedures, including instructions in the hazards they may encounter. Refer to Safety Manual, Confined Spaces, Chapter 14.
2. Employees entering confined spaces should be in good physical condition and psychologically suited for the job.
3. Before entering a confined space, a "Confined Space Pre-Work CheckList" shall be posted at the work site and must be completed and signed by all employees involved in entry into the confined space. Notify regional dispatcher prior to entry and when exiting a confined space.
4. Smoking or open flames shall not be permitted in the immediate area of the confined space.
5. Atmosphere tests using a Gastech (or equivalent) air sampling and monitoring instruments must be conducted by a trained and qualified person prior to any employee entering confined space. The instrument shall be tested prior to use by a qualified person who can ensure that the unit is functioning properly and that the batteries are not low. Low batteries will result in false readings that could be dangerous or fatal. If it is determined from the initial test, that the lower explosive level and oxygen levels are within acceptable standards, then entry may proceed. The air shall be continually monitored with an appropriate instrument for combustible gases and oxygen-deficient atmosphere. A record of such tests shall be kept at the job site for the duration of the work.
6. If the above conditions cannot be met, no one shall enter the confined space.
7. The area shall be ventilated for a minimum of 15 minutes prior to atmospheric testing and entry. Culverts need not be ventilated if the crew leader determines that the natural ventilation system is sufficient and the required atmospheric tests are satisfactory. **Should the atmospheric-testing instrument's audible alarm or visual indicator, indicate a change reduction in oxygen content or increase of gas, all individuals must evacuate the area immediately.**
8. At least one person shall stand by on the outside of the confined space ready to give assistance in case of emergency.
9. An emergency rescue plan shall be devised and discussed prior to entry into any confined space.

CONSTRUCTION PROGRAM  
CODE OF SAFE OPERATING PRACTICES  
APPENDIX A1 – CONFINED SPACE ENTRY PROCEDURES

- Immediately prior to entry, verify radio communications with the radio dispatcher, RE Office or the Highway Patrol for possible emergency rescue.
- Review emergency/rescue procedures. The name of the Rescue Response Agency and directions on how they should be contacted shall be posted at each worksite.
- The space shall be emptied, flushed, or otherwise purged of flammable, injurious or incapacitating substances to the extent feasible.
- Assure that the space has continuous ventilation (natural or mechanical). Minimum 15 minutes or continuous.
- The air shall be tested with an appropriate device to determine whether dangerous air contamination, oxygen deficiency and/or explosive hazard exists.
- A written record of the testing results shall be maintained at the work site. IF THE SPACE ATMOSPHERE TESTS HAZARDOUS – STOP DO NOT ENTER!
- “Hazardous” is defined as an atmosphere, which after venting, has an oxygen level below 19.5% by volume or a combustible gas content greater than 20% of its lower explosive limit (LEL).
- Maintain a log at the worksite for recording:
  - Name of person(s) entering enclosed space
  - Name of standby person
  - Date and time of each entry and exit
  - Initial % Oxygen
  - Initial % Lower Explosive Limit value
  - Periodic meter readings or notation that continuous monitoring equipment was used
- Assure that suitable lighting is provided in the work area.
- At least one standby person shall remain outside the enclosed space with an effective means of communication with the person(s) within the enclosed space and with the radio dispatcher, RE office or Highway Patrol.
- Testing of the atmosphere shall be conducted with sufficient frequency to ensure that the development of dangerous air contamination and/or oxygen deficiency does not occur during the performance of any operation.
- IF THE ATMOSPHERE BECOMES HAZARDOUS, ALL PERSONS ARE TO VACATE THE ENCLOSED SPACE IMMEDIATELY! Do not re-enter!!
- Notify the radio dispatcher, RE office or Highway Patrol upon exiting the enclosed space.



CONSTRUCTION PROGRAM  
CODE OF SAFE OPERATING PRACTICES  
CONFINED/ENCLOSED SPACE PROCEDURES

A confined space is defined by the concurrent existence of the following condition:

- Existing ventilation is insufficient to remove dangerous air contamination and/or oxygen deficiency which may exist or develop.
- Ready access or egress for the removal of a suddenly disabled employee is difficult due to the location and/or size of the opening(s).

An enclosed space is defined:

- Such spaces as tanks, vessels, compartments, ducts, sewers, pipelines, vaults, bins, tubs, pits, column forms and drainage systems.
  - Areas cleared from requirements for confined spaces.
1. No employee SHALL enter or remain in confined space or an area otherwise known to have an atmosphere deficient in oxygen or containing harmful amounts of dusts, gasses, or other substances.
  2. Prior to being authorized to enter enclosed spaces, employees SHALL review the Code of Safe Practices, Appendix A-1 "Confined Space Entry Procedures". Employees entering enclosed spaces SHALL be trained in the proper use of the atmospheric monitoring equipment, entry procedures, hazard detection and emergency action plans.
  3. Employee entering enclosed spaces SHALL use the procedures shown in Appendix A-1 "Confined Space Entry Procedures".

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# CHAPTER 15

## **RESPIRATORY PROTECTION PROGRAM**

### **GENERAL DETAILS ABOUT THE SELECTION AND USE OF RESPIRATORS**

#### **TABLE OF CONTENTS**

##### **PART 1. GENERAL DETAILS**

15.0	INTRODUCTION
15.1	PURPOSE
15.2	POLICY STATEMENT
15.3	THE REASON FOR A RESPIRATORY PROTECTION PROGRAM
15.4	SUMMARY OF THE RESPIRATORY PROTECTION PROGRAM REQUIREMENTS
15.5	ROLES AND RESPONSIBILITIES.
15.6	MEDICAL EXAMINATION AND MEDICAL CLEARANCE
	A. PASSING THE RESPIRATOR MEDICAL EXAMINATION
	B. FAILING THE RESPIRATOR MEDICAL EXAMINATION

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**PART 2. SELECTION AND USE OF RESPIRATORS**

***the  
1996  
respirator  
protection  
guide***

1. INTRODUCTION TO RESPIRATORY PROTECTION
2. THE PURPOSE OF RESPIRATORY PROTECTION
3. APPROVED RESPIRATORY PROTECTION EQUIPMENT
4. EQUIPMENT SELECTION
5. TYPES OF RESPIRATORS
6. HOW RESPIRATORS WORK
7. RESPIRATOR PROTECTION FACTORS
8. RESPIRATOR AND CARTRIDGE SELECTION
9. INSPECTION, MAINTENANCE, REPAIR, AND STORAGE
10. RESPIRATOR FIT-TESTING
11. EXPOSURE RECORDS FOR HAZARDOUS MATERIALS

**PART 3. CLASSROOM PREPARATION FOR INSTRUCTORS**

1. introduction to classroom discussion
2. classroom preparation and required materials
3. organizing handout materials
4. instructor's introduction
5. begin discussion

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# CHAPTER 15

## RESPIRATORY PROTECTION PROGRAM

### GENERAL DETAILS ABOUT THE SELECTION AND USE OF RESPIRATORS

#### PART 1. GENERAL DETAILS

##### 15.0 INTRODUCTION

This chapter represents the Department's respiratory protection program as required by the Cal-OSHA General Industry Safety Orders (GISO), Section 5144, Respiratory Protection Equipment.

##### 15.1 PURPOSE

The purpose of this chapter is to provide information about the use of respiratory protection equipment, and has been divided into three (3) parts as follows:

**Part 1. GENERAL DETAILS.** Provides general information about the Department's respiratory protection program, roles and responsibilities, and medical certification requirements.

**Part 2. SELECTION AND USE OF RESPIRATORS. *the 1996 respiratory protection guide*.** This section is the written text used for classroom discussion. It is also a guide for supervisors and employees whenever questions about respirators arise. It provides information about respiratory hazards, methods of hazard control, equipment selection, fit testing, and inspection and maintenance of respiratory equipment.

**Part 3. CLASSROOM PREPARATION FOR INSTRUCTORS.** This section covers information for classroom preparation. Instructors will remove **Part 2. *the 1996 respiratory protection guide*** from the manual to make copies for training purposes, or for interested employees, and/or others. (Replace the original pages in the manual after copies have been made.)

This chapter also includes information about the California Department of Food and Agriculture's Pesticide Application Regulations, and the labeling requirements of the National Institute for Occupational Safety and Health (NIOSH), and the Mine Safety and Health Administration (MSHA).

## 15.2 POLICY STATEMENT

Managers and supervisors are responsible to ensure that employees are protected from exposure to harmful airborne materials in the workplace.

## 15.3 THE REASON FOR A RESPIRATORY PROTECTION PROGRAM

The reason for respiratory protection program is simple: to protect employee's respiratory system (lungs) from inhaling harmful airborne materials found in the workplace.

Harmful materials can enter the body in four (4) ways:

1. inhalation into the lungs (**the body's respiratory system**),
2. absorption through the skin and eyes,
3. ingestion through the stomach, and/or
4. injection by cut or incision.

Of these four (4) methods of entry, inhalation (through the lungs) is the quickest and most direct route into the body.

**The information in this chapter has been written to ensure that supervisors and employees, who use respiratory equipment in their work, understand the risks, limitations, and requirements associated with respirator usage.**

### NOTE:

Respiratory equipment can only provide protection from inhalation of harmful airborne materials into the respiratory system (lungs).

For information regarding protection from the other forms of exposure (i. e., absorption through the skin and eyes, ingestion through the stomach, and injection) contact the Office of Safety and Health.

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**15.4 SUMMARY OF RESPIRATORY PROTECTION PROGRAM REQUIREMENTS**

Every employee who is expected to use respiratory protection equipment shall complete the following items in the order given:

- 1<sup>st</sup>** Pass an appropriate medical evaluation by a licensed physician upon initial assignment and annually thereafter.
- 2<sup>nd</sup>** Receive training initially and at least annually thereafter in the proper use, selection, maintenance, sanitation, and storage of the respiratory protection equipment they will use and/or be assigned.
- 3<sup>rd</sup>** Must be properly fit tested initially and at least annually thereafter in the respiratory protection equipment they will use and/or be assigned.
- 4<sup>th</sup>** Must use only NIOSH/MSHA approved respiratory protection equipment.

NOTE:

Employees who wear nontoxic particle masks (dust masks) as a “comfort” measure, and not as a required respirator, are not required to have a medical evaluation or fit test. However, they must be trained in the proper use and limitations of dust masks, and must use approved equipment.

\* \* \* \* \*

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## 15.5 ROLES AND RESPONSIBILITIES

- The Headquarters Office of Safety and Health will provide general and specific information about the Department's Respiratory Protection Program including guidance on the selection of respiratory equipment and updating the training program periodically on a statewide basis.

The Headquarters Office of Safety and Health will assist supervisors in Headquarters units and Sacramento area Service Centers in providing qualified trainers and/or arranging training-for-trainers for their program.

- The District Safety and Health Officers are each responsible to oversee the program, and ensure that qualified trainers and instructors are available for District personnel.
- The Service Center safety liaison personnel are responsible to oversee the program, and ensure that qualified trainers and instructors are available for Service Center personnel.
- The local supervisor; i.e., the branch chief, shop superintendent, maintenance manager, office chief, is responsible to:
  1. Ensure that all employees who are expected to wear respiratory protection equipment are trained in accordance with the instructions contained in this chapter, which includes training in use and limitations of equipment, facepiece fit testing, inspection and maintenance, sanitation, and storage of respiratory protection devices.
  2. Ensure that the correct respiratory protection equipment is available.
  3. Ensure that employees use the correct respiratory protection equipment as needed for the hazards and work environment.
  4. Arrange for initial and annual fit tests, medical examinations, and maintain applicable records.
- All employees who use respiratory protection equipment are personally responsible:
  1. To correctly use the respiratory protection equipment when needed, or directed to, and to ensure that it remains in good condition.
  2. To clean, inspect, maintain, and properly store their equipment.

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**15.6 MEDICAL EXAMINATION AND MEDICAL CLEARANCE**

All employees who wear a respirator shall have a medical examination by a physician and receive medical clearance before they can wear a respirator. The examination is paid for by the Department.

There are two types of medical examinations: Type 1. For employees who use respirators in normal Caltrans activities, and Type 2. For employees who are HAZMAT team members that wear SCBA self-contained apparatus respirators and protective clothing (level A or Level B). The medical examination also includes a Respirator Medical Questionnaire.

The examination is conducted to confirm that the employee is both physically and psychologically able to wear a respirator and perform their work. Employees are permitted to be re-examined if they fail the initial test as described below.

The content and scope of the medical examination is determined by the physician based upon the employee's responses to the Respirator Medical Questionnaire.

Type 1. Medical Examination typically includes the following:

**Physical Examination:**

- Height and weight
- Pulse
- Blood pressure

**Pulmonary Function Test - Spirometry:**

- Forced Vital Capacity (FVC)
- Forced Expiratory Volume 1 (FEV-1)
- Forced Expiratory Flow 25-75%
- Copy of the electronic graphic spirometry test results printed out

Type 2. Medical Examination includes all of the elements in the Type 1. Medical Examination, and the following:

1. CEC with differential, UA, and Chem Panel 20
2. Complete physical including:
  - genitourinary
  - neurologic
  - orthopedic
  - audiometry exam
  - electrocardiogram (EKG) resting EDG, and treadmill stress test (Bruce protocol)
  - eye - near/distant, visual acuity, depth, and color vision

Contact the Office of Safety and Health for additional specifications on Type 2, Medical Examinations regulations.



---

The Workers' Compensation Case Management Unit can assist in arranging for contracts with medical clinics and/or hospitals to provide medical examination services.

Confidential medical records are available only to the supervisor and others in the decision-making process. Copies of the medical record should be retained by the physician/clinic and Personnel Services.

A sample of the Medical Questionnaire is included at the end of this chapter.

### **15.6 (A) PASSING THE RESPIRATOR MEDICAL EXAMINATION**

To verify that an employee successfully passes the medical examination, the Department provides a form titled - Respirator Certificate. A copy of a certificate should be given to the employee to handcarry to the physician at the time of the medical examination.

The Respirator Certificate provides space for the physician to verify that the employee has passed the medical examination and may use a respirator, or that the employee has not passed the medical examination and shall not use a respirator.

The physician should sign a Respiratory Certificate, for the affected employee, and return it to the supervisor and/or Safety and Health Officer for appropriate action.

The supervisor and/or the Safety and Health Officer shall arrange to have the employee notified of his/her success or failure in passing the medical examination and shall be given a copy of the certificate.

Copies of the certificate should be retained by the supervisor. Copies should be sent to Personnel Services. An additional copy may be maintained by the Safety and Health Officer.

The respirator certificate may be changed to fit local needs.

A sample of the Respirator Certificate is included at the end of this chapter.

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**15.6 (B) FAILING THE RESPIRATOR MEDICAL EXAMINATION**

In the event an employee fails the medical examination (for medical reasons, such as the affects of the flu, or common cold, or permanent medical problem), the following procedures will be followed:

- The employee will be temporarily assigned modified work which does not require the use of a respirator.
- The employee will be administered a second medical examination within two (2) months of the initial examination.
- If the employee passes the medical examination, he/she will be allowed to resume duties that require a respirator. If the employee fails the second examination, he/she will be placed on modified work assignment and will not be allowed to use a respirator.
- The employee will be administered a third medical examination within two (2) months of the second examination.
- If the employee passes the third examination, he/she will be allowed to resume normal duties. If the employee fails the third examination, he/she will remain on modified work assignment and may be placed in another job assignment. The District/Headquarters Personnel Officer and the Workers' Compensation Coordinator will be contacted to discuss alternatives.

\* \* \* \* \*

# PART 1. RESPIRATORY PROTECTION

JULY 1996

15-10

## RESPIRATOR MEDICAL QUESTIONNAIRE

State of California - Department of Transportation <b>RESPIRATOR MEDICAL QUESTIONNAIRE</b>																																																																																		
EMPLOYEE NAME _____	COST CENTER _____																																																																																	
DOCTOR _____	DATE _____																																																																																	
<b>CONFIDENTIAL</b> Respiratory Screen Medical Questionnaire																																																																																		
<p><b>A) Have you recently:</b></p> <table style="width: 100%;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr><td>1. Had a persistent cough .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>2. Cough up phlegm .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>3. Had a shortness of breath .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>4. Had trouble breathing .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>5. Had wheezing in your chest .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>6. Had excessive fatigue or tiredness .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>7. Coughed up blood .....</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>8. 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7. Food, dust, chemical or animal allergy .....	<input type="checkbox"/>	<input type="checkbox"/>																																																																																
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9. High blood pressure .....	<input type="checkbox"/>	<input type="checkbox"/>																																																																																
10. Heart disease, heart attack or angina .....	<input type="checkbox"/>	<input type="checkbox"/>																																																																																
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12. An abnormal electrocardiogram .....	<input type="checkbox"/>	<input type="checkbox"/>																																																																																
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<p><b>E) Please list the chemicals or dusts which you presently work with which require you to use a respirator (use reverse side if needed):</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>																																																																																		

JULY 1996

15-11

**RESPIRATOR CERTIFICATE**State of California - Department of Transportation  
RESPIRATOR MEDICAL CERTIFICATE

EMPLOYEE NAME: \_\_\_\_\_ DATE \_\_\_\_\_

**Attention Physician:**

The medical examination for the above named individual is requested to determine if they are physically and psychologically able to wear respiratory protection equipment while performing their work.

Please complete the certificate after conducting a medical examination.

\* \* \* \* \*

**Attention Caltrans Supervisor:**

I have examined the above named individual to evaluate his/her ability to wear respiratory protection equipment with the following results:

\_\_\_\_\_ May use air-purifying/air-supplying respiratory equipment

\_\_\_\_\_ May use self-contained breathing apparatus (SCBA) and  
Level A protective suit

\_\_\_\_\_ May not use respiratory protective equipment

\_\_\_\_\_ Other restrictions as noted below:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Physician: \_\_\_\_\_

Signature of Physician: \_\_\_\_\_, Date: \_\_\_\_\_

PLEASE RETURN CERTIFICATE TO:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**RESPIRATORY PROTECTION PROGRAM**

**THIS SPACE AVAILABLE FOR NOTES:**

# CHAPTER 15

## RESPIRATORY PROTECTION PROGRAM

### **PART 2. SELECTION AND USE OF RESPIRATORS**

#### ***the 1996 respiratory protection guide***

1. INTRODUCTION TO RESPIRATORY PROTECTION
2. THE PURPOSE OF RESPIRATORY PROTECTION
3. APPROVED RESPIRATORY PROTECTION EQUIPMENT
4. EQUIPMENT SELECTION
5. TYPES OF RESPIRATORS
6. HOW RESPIRATORS WORK
7. RESPIRATOR PROTECTION FACTORS
8. RESPIRATOR AND CARTRIDGE SELECTION
9. INSPECTION, MAINTENANCE, REPAIR, AND STORAGE
10. RESPIRATOR FIT-TESTING
11. EXPOSURE RECORDS FOR HAZARDOUS MATERIALS

**RESPIRATORY PROTECTION PROGRAM**

**THIS SPACE AVAILABLE FOR NOTES:**

## 1. INTRODUCTION TO RESPIRATORY PROTECTION

### WHY DOES CALTRANS HAVE A RESPIRATORY TRAINING PROGRAM ?

California State law, as defined in the California Code of Regulations, Title 8, Cal-OSHA regulations and codified in General Industry Safety Orders (GISO), Section 5144, Respiratory Protection Equipment, requires every employer with employees, who will wear respirators in their work, to provide a Respiratory Protection Program that contains specific components to ensure employee health and safety.

To comply with the Cal-OSHA regulation, the following specific program components shall be completed by each respirator user in the order given:

- 1<sup>st</sup>** Pass an appropriate medical evaluation by a licensed physician upon initial assignment and annually thereafter.
- 2<sup>nd</sup>** Receive training initially and at least annually thereafter in the proper use, selection, maintenance, sanitation, and storage of the respiratory protection equipment they will use and/or be assigned.
- 3<sup>rd</sup>** Must be properly fit tested initially and at least annually thereafter in the respiratory protection equipment they will use and/or be assigned.
- 4<sup>th</sup>** Must use only NIOSH/MSHA approved respiratory protection equipment.

#### NOTE:

Employees who wear nontoxic particle masks (dust masks) as a “comfort” measure, and not as a required respirator, are not required to have a medical evaluation or fit test. However, they must be trained in the proper use and limitations of dust masks, and use NIOSH/MSHA approved respiratory protection equipment. .

Also, State law requires that any Caltrans employee who performs pesticide spraying must receive respirator training as defined in Title 3, and codified in the Food and Agriculture Pesticide Application Regulations, Section 6738, Safety Equipment.



## **2. THE PURPOSE OF RESPIRATORY PROTECTION**

The purpose of respiratory training is to teach employees how to prevent harmful airborne materials from entering their lungs by using respiratory protection.

An additional purpose is to provide information about respiratory hazards found in the workplace, respirator selection, fit-testing procedures, respirator inspection, maintenance and storage, and the medical evaluation process.

There are several types of harmful airborne materials that can be found in the workplace. They include:

- Gas and vapor contaminants (vapors, pesticides, and gases);
- Particulate contaminants (dust and fumes);
- Combination of gas, vapor, and particulate contaminants; and
- Oxygen deficiency (less than 19.5% of oxygen).

Harmful materials found in the workplace can enter the body in four (4) ways:

1. **inhaled into the lungs - the purpose of this Chapter,**
2. absorbed through the skin and eyes,
3. ingested into the stomach, and
4. injected by cut or incision.

Of these four (4) methods of entry, the lungs (human respiratory system) present the quickest and most direct route of entry into the body. Respirators only provide protection from inhalation exposures.

### 3. APPROVED RESPIRATORY PROTECTION EQUIPMENT

Only respiratory protection equipment approved by the National Institute of Safety and Health (NIOSH), or the Mine Safety and Health Administration (MSHA) is to be used by Caltrans employees.

NIOSH/MSHA approval of respiratory protection equipment is based on testing of the entire unit; therefore, all parts including the filters, cartridges, valves, body, gaskets, and straps must be those supplied by the original manufacturer.

The use of different or non-manufacturer supplied parts between brands is not allowed.

Filter cartridges are not interchangeable between brands.

For approval each respirator must pass specific tests based upon standards established by both NIOSH and MSHA.

When the respirator passes the tests, the respirator is issued an identification number known as a Testing and Certification (TC) Number. The approval number must appear on the box in which the respirator is packed from the manufacturer or on the written guidelines inside the package. The approval number must also appear on all replacement filters and cartridges that are packed and shipped by the manufacturer. This includes disposable respirators and single-use nontoxic particle masks (dust masks).

NOTE:

**Single-use, nontoxic particle masks** (dust masks) normally used for such things as sweeping the floor or for the control of nuisance dust are considered to be “respirators” and must have a NIOSH/MSHA approval (TC Number).

## 4. EQUIPMENT SELECTION

Selecting the correct respirator for the job is the first step in protecting employees from the hazards to which they may be exposed. The selection process must be based upon a well-thought out plan that includes the following items:

- Type of air contaminants present (i.e., particles, vapors, gases)
- Hazard of exposure (i.e., IDLH, eye irritant, toxicity)
- Warning properties of contaminants (See **\*SPECIAL NOTE-MATERIALS LIST Page 15 of 26**)
- Level of exposure
- Exposure time
- Work activity
- Characteristics and limitations of the respirator equipment
- Level of protection needed

See: NIOSH GUIDE TO RESPIRATOR SELECTION on **Page 23 of 26**  
for DECISION TREE.

The user should consult with the District/Headquarters Office of Safety and Health for assistance. Additional information can be obtained in other reference materials such as the "NIOSH Guide to Industrial Respiratory Protection" (published by NIOSH - National Institute for Occupational Safety and Health).

## 5. TYPES OF RESPIRATORS

The following briefly describes the types of respirators used by Caltrans:

1. **Disposable dust masks** are paper-type masks for protection against nontoxic nuisance dusts and mists. They are easy to wear and provide minimal protection.
2. **The half-face cartridge respirator** fits over the nose and under the chin. Half-masks are designed to seal more reliably than quarter-masks and provide increased safety to the wearer. This is the most common respirator used by Caltrans employees. Half-mask facepieces can also be purchased with a hose and belt mounted cartridges for those applications where the cartridges would interfere with other protective equipment; i.e., welding hoods. Half-face respirators are available as reusable or disposable models with a variety of cartridges.

3. **The full-face cartridge respirator** covers from roughly the hairline to below the chin. Because they seal more reliably, they provide greater protection and provide some eye protection as well. Full-face respirators are available with a variety of cartridges.
4. **Powered air purifying respirators (PAPR's)** have a battery powered fan to draw air through a filter(s) and blow it into a hood or facepiece. Some models incorporate the blower and filter into a one piece plastic hat that includes a faceshield. Hoods are generally soft, loose fitting types, but some sandblast type hard hoods can be used. Full-face or half-face facepieces can also be used. PAPR's provide moderate protection and are comfortable to wear.
5. **Sandblasting hoods and helmets** generally enclose the person's head in a hard shell. They serve two (2) functions: they provide fresh air to the wearer and protect the head and body from flying particles generated by blasting. They rely on an external pump or compressor to supply clean air to the wearer through a hose. They are generally considered "loose-fitting" and provide moderate protection.
6. **Air supplied respirators** use external air supplies (air compressor with hoses or carried air tanks) and have tight fitting full facepieces. These include self contained breathing apparatus (SCBA) and air-line respirators. They maintain a positive pressure inside the facepiece and provide the highest level of protection.

## 6. HOW RESPIRATORS WORK

Respirators fall into two (2) classes:

**Air-purifying** - Basically a filtering system that cleans the air being inhaled. It is used to remove the contaminants from the air.

**Air-supplying** - A system that supplies its own air through a hose or tank and is independent of the surrounding air. It is used where there is insufficient oxygen in the air or where air-purifying types do not provide enough protection.

**Air-purifying** - This system depends on the surrounding air for oxygen and filters the contaminants from the employee's breathing air. It is the easiest type to train on and use, but does have limitations.

Before using an air-purifying respirator, the following conditions shall be assured:

- the atmosphere of the work area must contain at least 19.5% oxygen,
- approximate concentration of contaminants must be known to ensure that the respirator's capabilities are not exceeded,
- concentration of contaminants cannot exceed the "Immediately Dangerous to Life and Health" (IDLH) levels (Generally, air purifying respirators cannot be used with IDLH materials unless the concentration is known.),
- contaminants must have good warning properties so filter "breakthrough" can be detected, (See **\*SPECIAL NOTE Page 15 of 26**)
- employee must be fit-tested to ensure the correct size of respirator and must wear the respirator properly

(Exception: powered air-purifying respirators and sandblasting hood/helmets with loose fitting hoods do not require fit-testing.),

- employee must be medically capable of wearing an air purifying respirator.

The air-purifying class of respirator includes all types that use filters, cartridges, canisters, or combinations of filters including powered models and dust masks.

There are many types, styles, and shapes including half-face and full-face styles, quarter masks, dust masks, gas masks, and powered air-purifying types with masks and hoods. They may be single or multiple cartridge/filter styles.

**SPECIAL NOTE:**

Title 3 of the Department of Food and Agriculture regulations requires that when air-purifying type respirators are used for protection against pesticides, the following guidelines shall be used:

- 1) the air-purifying elements shall be replaced according to pesticide product labeling directions; or
- 2) respiratory equipment manufacturer recommendations, whichever is most frequent; or
- 3) at the first indication of odor, taste, or irritation; or,
- 4) absent any other instructions on service life, at the end of each day's work period.

For other non-pesticide uses, cartridges/filters shall be changed whenever "breakthrough" occurs, whenever the filters become clogged and breathing becomes difficult, or every eight (8) hours. Store used cartridges separately from respirator body. Put them in a plastic bag to prevent cross contamination.

If the wearer detects an odor, taste or irritation, he/she shall leave the work area immediately and go to a safe area with clean air away from the hazard. The cartridge on the respirator shall be replaced and the respirator fit shall be checked with the positive-negative test. If the fit is satisfactory, the work may continue; otherwise, the employee shall not resume work until the situation has been corrected.

Exceptions to the change intervals described above will be allowed when exposure is minimal and the respirator usage is a "comfort" measure. Supervisors shall be responsible to determine if the change interval can be extended.

"Disposable" and "one-time use" respirators shall be thrown away after use.

**Air-supplying** - This type of system supplies its own breathing air through a carried tank or airline.

Because they supply their own air, these systems are useful in environments where contaminants are unknown or have poor warning properties, and/or where large concentrations of contaminants are expected. This type of system is often difficult to work with, requiring special support equipment and training.

Because of their weight and restrictiveness, their use requires more physical effort; therefore, employees who are required to work with this type of respiratory equipment must be both physically and psychologically able to perform the work.

**There are basically two (2) types of air supplying respirators:**

**1) TANK SUPPLIED** - “self-contained breathing apparatus” (SCBA) respirator.

**Characteristics -**

- air tank is carried on back of user, supplies air to full-facepiece, tight fitting mask;
- self-contained unit, not connected to outside equipment;
- does not depend on outside air, can be used where air purifying type respirators are not acceptable;
- this type of respirator provides maximum protection from contaminants; and
- maintains positive pressure inside facepiece.

**Restrictions -**

- has limited supply of air (most Caltrans equipment has 1-hour air tanks with 1/2 hour service life);
- physically and psychologically demanding of user;
- requires on-site medical monitoring during extended use to prevent physical exhaustion;
- requires specialized training and extensive "hands-on" use to maintain competence;
- bulky, restricts movement and vision;
- equipment requires monthly inspection and annual service;
- requires fit-test of face mask;
- requires annual medical evaluation before use;
- requires specialized support equipment to fill air tanks;
- must ensure that air tanks contain the correct air for the designed use; (Grade “D” Breathing Air); and
- use restricted to trained HAZMAT team members only.

**2) AIRLINE SUPPLIED** - "airline" respirator.**Characteristics**

- breathing air is supplied through a hose to a full facepiece, half facepiece, or loose fitting helmet/hood;
- maintains positive pressure inside mask or hood;
- connected to outside air supplying equipment with air hose;
- does not depend on outside air, so can be used where air-purifying respirators are not acceptable;
- unlimited (usually) supply of air, extended duration work is possible, and
- full facepiece type provides maximum protection from contaminants, loose fitting hoods provide limited protection.
- hood can also provide physical protection from particles; i. e., sandblasting.

**Restrictions**

- limited mobility because of air hose;
- restricted vision (helmet/hoods);
- requires specialized training;
- requires fit test of face mask (exception: loose helmet/hood);
- requires annual medical evaluation before use;
- loose hoods provide lower protection factors, and may not be suitable for high concentrations of contaminants, tight fit facepieces require auxiliary air bottles if used in dangerous atmospheres; and
- requires special air supplying equipment:
  - 1) "breathing air only" air compressor; or
  - 2) air compressor with a continuous carbon monoxide monitor with/without air temperature alarm, or
  - 3) weekly carbon monoxide check of air (log and retain for 6 months), and compressor discharge air temperature alarm, and
  - 4) appropriate in-line sorbent beds and filters.



**SPECIAL NOTE:**

Although both **SCBA** and tight fitting **airline supplied respirators** can provide protection from high concentrations of contaminants and dangerous atmospheres, they shall not be used by Caltrans employees for entry into "Immediately Dangerous to Life and Health" (IDLH) atmospheres, explosive, flammable and/or oxygen deficient locations unless the following conditions are met:

- 1) must have a complete site safety plan;
- 2) must perform proper "hazard assessment" before entry;
- 3) must have backup team equipped with SCBA standing by before entry;
- 4) must use other employees for visual and/or verbal contact (buddy system);
- 5) must have a communications system;
- 6) must have proper environmental monitoring equipment;
- 7) must have proper additional protective equipment as required;
- 8) all employees must be properly trained;
- 9) must have appropriate decontamination set up before entry;
- 10) must have appropriate emergency response procedures and rescue equipment on site;
- 11) must have provisions for emergency medical help on site; and
- 12) if utilized in a confined space, all provisions contained in Chapter 14 - CONFINED SPACES of this manual shall apply;
- 13) have notified the District/Headquarters Office of Safety and Health.

\* \* \* \* \*

## 7. RESPIRATOR PROTECTION FACTORS

Different types of respirators have different ratings of effectiveness. These ratings are based on fit, type of seal, and physical characteristics of the equipment. These ratings are called PROTECTION FACTORS, and are established by National Institute of Occupational Safety and Health (NIOSH) for each type of respirator.

TYPE OF RESPIRATOR	PROTECTION FACTOR
DUST MASK .....	5
HALF FACE CARTRIDGE RESPIRATOR .....	10
FULL FACE CARTRIDGE RESPIRATOR .....	50
LOOSE FITTING BLAST HELMET/HOOD WITH SUPPLIED AIR IN CONTINUOUS FLOW .....	25*
LOOSE FITTING HOOD WITH POWERED AIR PURIFYING RESPIRATOR (PAPR) WITH HIGH EFFICIENCY (HEPA) FILTERS .....	25
TIGHT FITTING POWERED AIR PURIFYING RESPIRATOR (PAPR) WITH HIGH EFFICIENCY (HEPA) FILTERS .....	50
HALF FACE AIRLINE SUPPLIED RESPIRATOR IN POSITIVE PRESSURE MODE .....	1,000
TIGHT FITTING, FULL FACEPIECE, AIRLINE SUPPLIED RESPIRATOR IN POSITIVE PRESSURE MODE .....	2000
TIGHT FITTING, FULL FACEPIECE, SELF-CONTAINED BREATHING APPARATUS (SCBA) IN POSITIVE PRESSURE MODE .....	2,000 +

These protection factors are used to determine if the selected respirator will provide adequate protection at a given level of contamination.

\*NOTE:

Bullard Model 77 and 88 Sandblasting hoods have a tested protection factor of 1,000 when operated in accordance with manufacturer's air flow requirements.

See example on next page.

EXAMPLE:

- A work operation involves exposure to lead dust at a concentration of 1,000 ug/m<sup>3</sup> in the air.
- The employee has a half face cartridge respirator with high efficiency (HEPA) cartridges with Protection factor = 10. (see Protection Factors above),
- The Cal-OSHA Permissible Exposure Limit (PEL) for lead is 50 ug/m<sup>3</sup>.

Will the selected respirator provide adequate protection for the employee ?

-----  
**Concentration in Air**

----- = **Respirator Wearer's or User's Exposure.**

**Protection Factor**

-----  
**1,000 ug/m<sup>3</sup>**

----- = **100 ug/m<sup>3</sup>** = **Respirator Wearer's or User's Exposure**

**10**

DECISION:

- Because the respirator user's exposure would be more than the permissible exposure limit, a half-face respirator is NOT adequate to protect the employee.
- A full-face cartridge respirator with ( protection factor of 50) or a blast helmet (protection factor of 25) would be adequate to protect the employee.

## 8. RESPIRATOR AND CARTRIDGE SELECTION

To standardize usage and ensure interchangeable parts of respiratory protection equipment within the Department, the following brands and models are recommended:

- Half-face respirator, use MSA Comfo II;
- Full-face respirator, use MSA Comfo II;
- SCBA respirators, use MSA Air Pack;
- Dust masks, may use various brands;
- Airline supplied helmet (sand blasting), use various brands;
- Airline supplied Full-face, use various brands;
- Powered Air-Purifying Respirator (PAPR), use various brands.

Approved respirators currently in use may continue to be used but, when replacements are being considered, use the above recommendations.

If the above recommendations do not meet your needs, contact the Headquarters Office of Safety and Health for assistance.

### **\*SPECIAL NOTE: MATERIALS LIST**

Never use **air-purifying** respirators for the following materials:

Acrolein	Methylene bisphenyl isocyanate
Aniline	Nickel carbonyl
Arsine	Nitro compounds: Nitrobenzene,
Bromine	Nitrogen oxides,
Carbon Monoxide	Nitroglycerin,
Dimethylaniline	Nitromethane
Dimethyl sulfate	Ozone
Hydrogen cyanide	Phosgene
Hydrogen fluoride	Phosgene
Hydrogen selenide	Phosphorus trichloride
Hydrogen sulfide	Stibine
Methanol	Sulfur chloride
Methyl bromide	Toluene diisocyanate (TDI)
Methyl chlorine	Vinyl chloride

This list is not all inclusive. Contact the Safety and Health Office for information and assistance.

See next page for respirator cartridge selection guide .

# RESPIRATOR CARTRIDGE SELECTION GUIDE

To assist employees in the selection of the proper respirator cartridge, the following cartridges are available directly from MSA at 1-800-MSA-2222. Except for GMP the Caltrans warehouse does not stock these items.

COLOR	MSA #	TYPE	CONTAMINANT - JOB TYPE
BLACK	GMP 464025	Organic vapor w/prefilter (Pesticides)	Pesticides, polyester concrete, solvents, organic vapors
MAGENTA	H 464035	HEPA- High Efficiency Particulate	Asbestos, lead, dust, metal fumes, regular asphalt paving, fit testing
MAGENTA and BLACK	GMA-H 464029	Combination - HEPA & Organic Vapor	PBA asphalt paving, Rubber Modified asphalt paving, methacrylate, polyester concrete
MAGENTA and YELLOW	GMC-H 464027	Combination - HEPA & Acid Gas	Rubber Modified paving, fit testing

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For assistance in respirator selection, contact the Safety Office.

NOTE:

See NIOSH Guide to Respirator Selection - DECISION TREE, **Page 23 of 26.**

## **9. INSPECTION, MAINTENANCE, REPAIR, AND STORAGE**

All respiratory protection equipment shall be inspected before and after each use. The inspection shall include examination of:

1. the facepiece;
2. the head straps or head harness;
3. the exhalation and inhalation valves;
4. the air-purifying elements (if applicable);
5. if equipped with a corrugated breathing tube, the tube, the tube ends, connectors, clamps, and tube for cracks and stretching;
6. the air supplying hoses, regulator (if applicable) and filters, etc.; and
7. the tanks and harness for cuts, cracks, and defects.

Rubber or elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber elastomer parts with a massaging action will keep the parts pliable and flexible and prevent the parts from distorting during periods of storage.

If a rubber valve, after being rolled between the thumb and forefinger, does not return to its original shape, it should be replaced.

If any part of the respirator is damaged or missing, the respirator shall not be used until it has been properly repaired.

Replacement and repair of respirators shall be done only by experienced persons with replacement parts designed for the specific respirator.

No attempt shall be made to replace component parts or make adjustments or repairs to respirators unless the repair work is in full compliance with the manufacturers' instructions.

New equipment shall be issued to replace worn or damaged equipment. Any equipment that appears to be or is suspected of being damaged shall be inspected and removed from service by the supervisor.

Always store the respirator, filters, cartridges, and other parts in a clean dry place, preferably in a tightly closed paper or plastic container. They should be protected from dust, sunlight, heat, extreme cold, excessive moisture, and chemicals.

They should be stored in a single layer with the facepiece and exhalation valve in a normal rest position to prevent the rubber from taking a permanent distorted shape. A tightly closed plastic container is preferred.

Respirators shall not be stored in personal lockers or tool boxes unless they are in a separate respirator container. A rectangular plastic container with a lid size of at least 11 inches, by 7 - 3/8 inches, by 4 - 5/8 inches deep is recommended for storing the half mask respirator.

Respirators and SCBA equipment that are not routinely used, but kept for emergency use, shall be inspected after each use and at least monthly to ensure that the equipment is in satisfactory working condition. SCBA inspections shall be documented and maintained by the supervisor. A record of each inspection will also be kept with the individual SCBA unit.

Respirators shall be cleaned as necessary, or on a weekly basis at a minimum. The cleaning shall include cleaning, sanitizing, rinsing, and drying.

The following are useful hints when cleaning respirators:

- Use a soft brush to facilitate cleaning.
- Remove filters, cartridges or canisters, and dispose of as necessary.
- Wash facepiece and breathing tube in mild soap, rinse thoroughly to remove all residue.
- Air dry in a clean area. (Never apply heat to respirators.)
- Clean all parts as recommended by the manufacturer.
- Inspect valves, head straps, and other parts and replace as necessary.
- Insert new filters, cartridges, or canisters.
- Make sure all seals are tight with cartridge gaskets in place.
- Place in sealable plastic bag or container for storage.

Respirators worn by multiple users must be disinfected and cleaned between uses.

Single purpose dust masks and disposable respirators shall be thrown away at the end of the work shift, or as needed.

## 10. RESPIRATORY FIT-TESTING

The purpose of the fit-test is to match the respiratory device to the physical characteristics of the individual's face. To ensure that the respiratory protection equipment will work properly under actual working conditions, the facepiece or mask must fit properly. Face size, gender, and bone structure affect the face seal and the fit.

All masks and facepieces come in three sizes: small, medium, and large. Most people can obtain a good fit with the medium size, but other sizes may be required.

Generally, a full facepiece will fit better than a half-facepiece mask; but for most work applications, a half-facepiece mask is acceptable.

### Special Conditions

Before starting the fit-test process, the following conditions must be evaluated:

- **Facial hair** - Employees who must wear respirators must shave off their facial hair, as facial hair interferes with a good seal.
- **Eye glasses** - Should not be used with full-facepiece respirators. (Use spectacle kits to hold eyeglass frames in facepiece.)
- **Facial deformities** - such as scars, deep skin creases, prominent cheekbones, or similar conditions can prevent proper sealing.
- **Communications** - talking while wearing a facepiece can cause a break in the seal.
- **Physiological response** - respirators may impose some physiological stress. Weight of the equipment increases energy requirements and cartridges cause breathing resistance.



**Specific Details of the Fit-Testing Process**

The actual fitting of the respirator to the individual consists of the following steps:

**1. Face Fitting**

The employee's acceptance of a particular respirator depends on the facepiece fit, interference with vision, weight of the device, breathing resistance, and general over-all comfort. The ability to form a good facepiece seal depends on the respirator design and facial features of the individual.

Select a respirator that closely matches the size of the individual's face size. MSA respirators come in three sizes: small, medium, and large. Secure the respirator facepiece to the individual's face by adjusting the head straps. The respirator should fit comfortably against the facial contours of the person, not too tight, and should not distort facial features of the person or deform the facepiece of the respirator. It should have a comfortable facepiece-to-facial skin contact.

**2. Negative Pressure Test**

The negative pressure test consists of: closing off the inlet of the canister, cartridge(s), or filters(s) by covering with the palm(s) of the hand or using rubber seals, or by squeezing the breathing tube so that it does not pass air; inhaling gently so that the facepiece collapses slightly; and holding the breath for 10 seconds. If the facepiece remains slightly collapsed and no inward leakage is detected, the respirator is probably tight enough. The employee should use this test each time a respirator is worn.

**3. Positive Pressure Test**

This positive pressure test is very like the negative pressure test, and it has the same advantages and limitations. It is conducted by closing off the exhalation valve and exhaling gently into the facepiece. The fit is considered satisfactory if slight positive pressure can be built up inside the facepiece without any evidence of outward leakage. The employee should use this test each time a respirator is worn.

**4. Irritant Smoke Test**

The employee shall wear a respirator that has been selected as described above, except that each respirator shall be equipped with high efficiency particulate (HEPA) cartridges.

The irritant smoke is made up of stannic chloride-impregnated pumice.

The employee shall be allowed to smell a weak concentration of the irritant smoke to familiarize him/herself with its characteristic odor.

The tests an employee shall perform are the conventional positive pressure and negative pressure test checks as described above, and to wear the respirator for at least fifteen (15) minutes before starting the test.

Advise the employee that the smoke can be irritating to the eyes and instruct the employee to keep his/her eyes closed while the test is being performed.

The supervisor/trainer shall direct the stream of irritant smoke from the tube towards the facepiece area of the employee. Begin at least 12 inches from the facepiece and gradually move to within 3 or 4 inches moving around the whole perimeter of the facepiece mask. Be cautious, ends of irritant smoke tubes are sharp.

The stannic chloride tube is scored at each end for easy breaking. A squeeze bulb with a short rubber tube aspirates air through the tube. Visible smoke is immediately formed by contact of the stannic chloride with moisture in the air.

The following exercises shall be performed while the respirator seal is being challenged by the smoke.

- normal breathing;
- deep breathing (breaths are deep and regular);
- turn head side-to-side;
- nod head up-and-down; and
- talk, slowly and distinctly.

If the irritant smoke produces an involuntary reaction (cough) by the employee, the test shall stop and another respirator shall be used. It may be necessary to try different sizes of respirator before finding the most suitable item. Continue the test after finding the correct respirator. The employee should wash his/her hands and face after the test.

Only approved HEPA cartridges shall be used during the irritant smoke test. For example, for MSA respirators, use Type H 46035, GMA-H combination filter - cartridge - 464029, or GMC-H combination filter - cartridge - 464027.

## 5. Fit-Test Record

After the respirator fit-test has been completed, the supervisor shall document that the employee has successfully completed the fit-testing and is qualified to wear a respirator. The information shall be documented on the "Respiratory Equipment Fitting and Testing Record" form.

The fit-test record form provides for the name of the employee, date of the test, and type of respirator used. The employee shall sign the form to verify that he/she has been fit-tested.

Copies of the fit-test record shall be maintained by the supervisor.

A sample of the "Respiratory Equipment Fitting and Testing Record" form is shown at the end of this section.

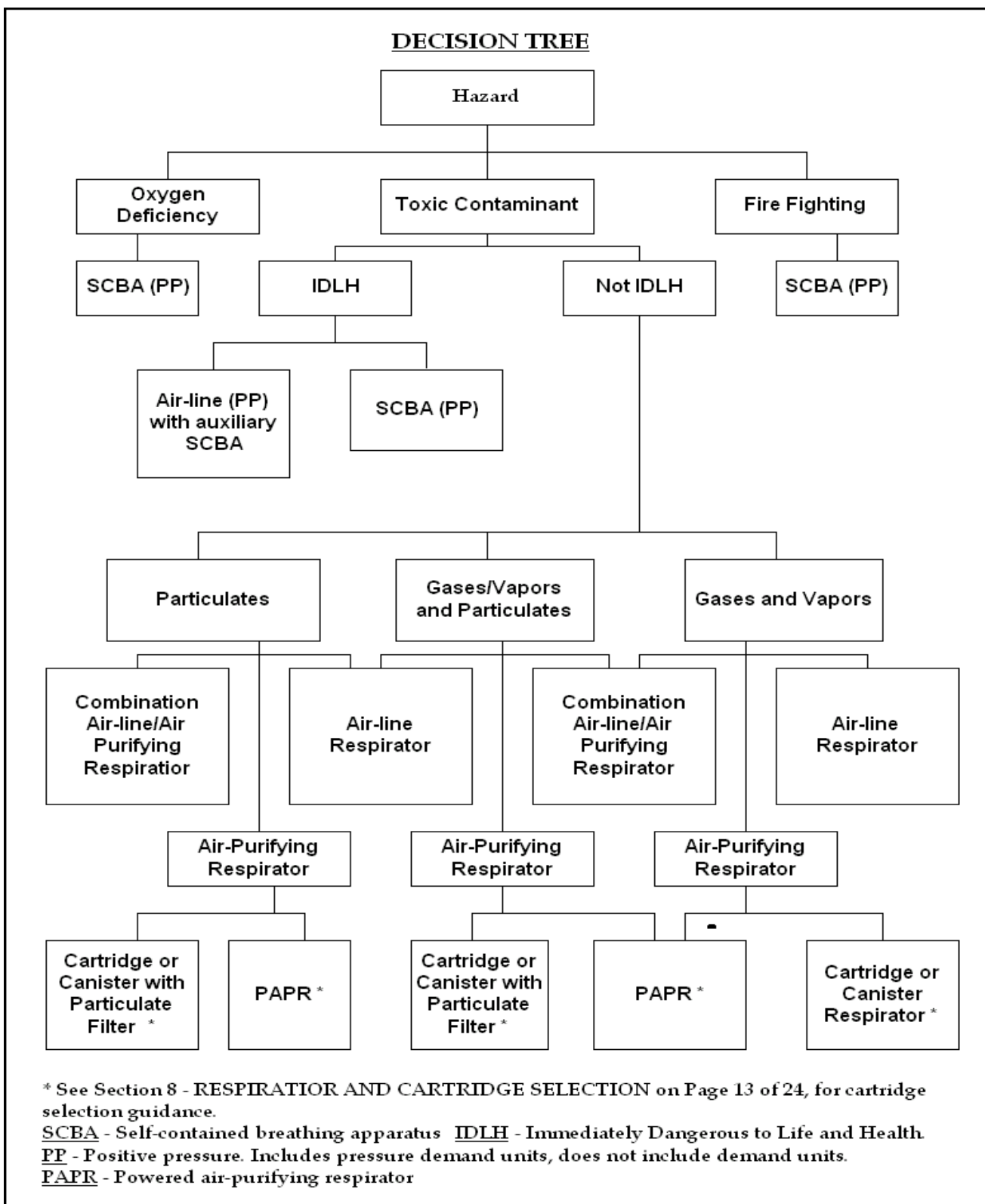
# 11. EXPOSURE RECORDS FOR HAZARDOUS MATERIALS

There are two (2) methods to record employee exposure to hazardous materials:

**1. All Programs.** [Includes Maintenance, Construction, Structures and others.] Supervisors should establish a "Respirator Information Data Card" for each employee required to wear a respirator. The card should be kept with the employee's medical information and transferred with the employee as they change positions.

**2. Maintenance Program.** Maintenance supervisors with pesticide applicators will use the "D Card" in the MMS computer system to record respirator usage.

A sample of the "Respirator Information Data Card" showing employee's name, type respirator, medical exam and fit-test, is included at the end of this section.

**NIOSH GUIDE TO RESPIRATOR SELECTION Page 22 of 24**

## Page 24 of 26

THIS FORM NOT PRINTED FULL SIZE.

### RESPIRATOR INFORMATION DATA CARD

# Respirator Information Data Card

Name \_\_\_\_\_

Name\_\_\_\_\_

W.S.S.

Type Respirator \_\_\_\_\_ Last Fitting & Training \_\_\_\_\_

## Size Respirator

[illegible]

**RESPIRATORY PROTECTION INSTRUCTOR GUIDE**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 15

## RESPIRATORY PROTECTION PROGRAM

### **PART 3.**

### **CLASSROOM PREPARATION FOR INSTRUCTORS**

1. Introduction to classroom discussion
2. Classroom preparation and required materials
3. Organizing handout materials
4. Instructor's introduction
5. Begin discussion



---

## 1. INTRODUCTION TO CLASSROOM DISCUSSION

This training material has been designed to aid the instructor in the office, maintenance region, or shop to achieve and maintain a training program that will comply with the requirements of the General Industry Safety Orders and applicable NIOSH/MSHA guidelines.

**The training also includes provisions for each participant to:**

1. have an opportunity to handle the respiratory equipment,
2. be properly fitted,
3. be tested for facepiece-to-face seal,
4. have a long familiarization period (15 to 30 minutes) of wear in a normal air environment,
5. understand equipment inspection, cleaning, repair and storage.

**Other topics include:**

1. engineering controls and administrative controls, and why respirators are needed,
2. the nature of the respiratory hazard and what happens if the respirator is not used properly,
3. why the particular type of respirator is being used,
4. how to recognize and handle emergencies.

The classroom training allows for demonstrations and practice sessions in wearing, adjusting, and determining a proper and comfortable fit for each participant.

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## **2. CLASSROOM PREPARATION AND REQUIRED MATERIALS**

The instructor should have the following items available in the classroom:

- COPIES OF PART 2. *the 1996 respiratory protection guide*
- VIDEO MACHINE AND VIDEO TAPE
- OVERHEAD PROJECTOR
- WALL DISPLAYS
- SAMPLE RESPIRATORS
- SAMPLE CARTRIDGES AND FILTERS
- CLEANING SOLUTIONS, SMOKE TUBES, ETC.
- EASEL AND PAPER
- MARKER PENS
- SIGN-UP SHEET

## **3. ORGANIZING HANDOUT MATERIALS**

Handout materials should be organized in the order in which they will be passed out. Wall displays should be posted. Material samples should be placed on table tops for viewing. The training plan provides a step-by-step narrative for discussing respirators.

**ONLY EMPLOYEES WHO HAVE TAKEN AND PASSED THE MEDICAL  
EVALUATION ARE PERMITTED TO ATTEND THE TRAINING.**

**MAKE SURE THAT EACH PARTICIPANT HAS BEEN MEDICALLY CERTIFIED.**

---

## 4. INSTRUCTORS INTRODUCTION

The instructor should begin the training class by introducing him/herself.

Welcome to the Caltrans Respiratory Protection Training Course

WHO AM I? Introduce self and co-instructor if any.

WHY I AM HERE. Today I (we) will provide you with information necessary to understand how respirators work, how they can protect you against hazards in the workplace.

Before I (we) begin I (we) want to explain some general housekeeping details and how this training program is organized. (Explain time period of training, rest rooms, rest breaks, and lunch, if applicable.)

Pass out sign-up sheet. Tell participants which accounting numbers to use for their time records.

## 5. CLASSROOM DISCUSSION

Remove Part 2. SELECTION AND USE OF RESPIRATORS, *the 1996 respiratory protection guide*, beginning with page 15-13 (**Page 1 of 24**) through page 15-36 (**Page 24 of 24**) from the Safety Manual to make copies for the each participant.

After making copies for the participants replace the pages back in the Safety Manual for future use.

Before beginning the discussion give each participant a copy:

*the  
1996  
respiratory  
protection  
guide*

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# CHAPTER 16

## **HAZARDOUS MATERIALS COMMUNICATION PROGRAM**

### **REQUIREMENTS FOR HANDLING HAZARDOUS MATERIALS**

#### **TABLE OF CONTENTS**

16.00	INTRODUCTION
16.01	PURPOSE
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16.03	PROGRAM RESPONSIBILITIES
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16.05	EMPLOYEE'S RIGHT TO KNOW
16.06	HAZARDOUS WARNING AND LABELING SYSTEMS
16.07	LABELING OF HAZARDOUS SUBSTANCE CONTAINERS
16.08	INVENTORIES
16.09	NEW MATERIALS
16.10	MATERIAL SAFETY DATA SHEETS (MSDS)
16.11	TRAINING

JULY 1996

16-2

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**HAZARDOUS MATERIALS COMMUNICATION PROGRAM**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 16

## **HAZARDOUS MATERIALS COMMUNICATION PROGRAM**

### **REQUIREMENTS FOR HANDLING HAZARDOUS MATERIALS**

#### **16.00 INTRODUCTION**

This chapter discusses the training and information requirements if employees are using or handling hazardous materials in the workplace. It explains container labeling and other forms of warnings for hazardous materials, Material Safety Data Sheets (MSDS), and employee training requirements.

General Industry Safety Order, Section 5194 Hazard Communication, requires employers to have a written hazardous materials communication program if hazardous materials are present in the workplace.

#### NOTE:

A copy of this chapter shall be posted in each worksite where hazardous materials are used, and a copy should be made available, upon request, to interested employees, or their designated representative.

#### SPECIAL NOTE to Supervisors:

Making copies of this chapter available to interested persons is not a substitute for informing and training employees about hazardous materials, but is an additional action required by Cal-OSHA.

#### **16.01 PURPOSE**

The purpose of this chapter is to provide detailed information about hazardous material container labeling, inventory procedures, Material Safety Data Sheets (MSDS), training about hazardous materials, and industry-wide hazard warning labeling systems.

#### **16.02 POLICY STATEMENT**

Employees shall be provided information and training about the hazardous materials to which they may be exposed. Also, no hazardous materials will be delivered, stored, or used at any Caltrans worksite or facility unless they are properly labeled, tagged, or marked and the Material Safety Data Sheet (MSDS) is readily available.

**16.03 PROGRAM RESPONSIBILITIES**

- Managers and supervisors are responsible to ensure that all elements of this program, including inventory listings, Material Safety Data Sheets (MSDS), labeling, and training are implemented and provided to all employees who are exposed, or can reasonably expect to be exposed, to hazardous materials.

**Notifying Caltrans personnel**

- Supervisors shall notify their employees of any hazardous materials they may be exposed to while working at a facility or project.
- Supervisors shall notify other employees working nearby of any hazardous materials that are in use and that they may be exposed to, and provide a MSDS if needed.
- Caltrans employees shall notify their supervisor of any new hazardous material that is brought on to the worksite, and that employees may encounter.

**Notifying non-Caltrans personnel**

- Resident engineer/contract administrator/supervisor who represents Caltrans interest at a project where hazardous materials are used or stored will notify non-Caltrans personnel of the hazardous materials, already at the worksite, that they may encounter.
- Resident engineer/contract administrator/supervisor shall notify non-Caltrans personnel of any new hazardous material that may be brought to the worksite by Caltrans or by others under Caltrans direction.

**Oversight and program support**

- Headquarters Office of Safety and Health is responsible for overseeing the Department's Hazardous Materials Communication Program, disseminating information, and providing direction to the District/Service Center managers and supervisors regarding hazardous materials. This includes providing information and assistance to supervisors in obtaining MSDS's, and assisting in providing the required training.

- 
- Headquarters Safety and Health Officer will administer and oversee the Hazardous Materials Communication Program for Sacramento area supervisors, the Administrative Service Center, and others not specifically assigned to local district offices or other service centers.
  - District Safety and Health Officers shall be responsible for administering and overseeing the Hazardous Materials Communication Program at the District level. This includes providing information and assistance to supervisors in obtaining Material Safety Data Sheets, and providing the required training.

#### **16.04 DEFINITIONS**

Hazardous Materials - any substance which is a physical or health hazard, or is included on the Cal-OSHA Director's List of Hazardous Substances, or is listed in Title 22 of the California Code of Regulations, Section 12000, Chemicals Known to the State to Cause Cancer or Reproductive Toxicity (Proposition 65 Substances.)

Physical Hazard - a substance that is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric (ignites spontaneously in air at 130° F or less), unstable (reactive), or water reactive.

Health Hazard - a substance for which there is significant scientific evidence that acute or chronic health effects may occur in exposed employees. This includes carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

#### **16.05 EMPLOYEE'S RIGHT TO KNOW**

As part of Caltrans Hazard Communication Program employees have the right:

- To personally receive information about the hazardous materials to which they may be exposed.
- For their physician or collective bargaining agent to receive information about the hazardous substances to which the employee may be exposed.
- To not be discriminated against when exercising their "right to know" under the Hazardous Materials Communication Program.



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## 16.06 HAZARD WARNING AND LABELING SYSTEMS

To ensure that all users understand the health risks and hazards associated with various products, a “Hazard Warning and Labeling System” using words, pictures, symbols, or a combination will appear on a label or other form of marking on the container to convey the health hazards and physical hazards of the substance(s).

Two of the most common labeling systems are the National Fire Protection Association (NFPA 704), and the Hazardous Materials Identification System (HMIS)

These systems provide a numeric key to indicate the relative hazard of the material in the areas of Health, Flammability, and Reactivity. The number system is from “0” for non-hazards to “4” for extreme hazards.

The numbers are displayed on a color coded symbol or label: BLUE background for HEALTH hazard, RED background for FLAMMABILITY hazard, and YELLOW background for REACTIVITY hazard.

An additional WHITE color background is provided for SPECIAL hazardous properties of the material; i. e., oxidizer, poison, water reactive, etc.

The NFPA system arranges the colors in a “diamond” shape, starting with BLUE on the left corner, RED on the top, YELLOW on the right corner, and WHITE on the bottom.

The HMIS system stacks the colors vertically, with BLUE on the top, then RED, then YELLOW, and WHITE on the bottom. The HMIS system also provides a field for required personal protective equipment (PPE) to be used with the material.

Occasionally, NFPA hazards will be written horizontally, left to right as: NFPA-”A”-”B”-”C”-”D”, in this arrangement, health is the first, then flammability, reactivity, and special hazards.

Contact the Office of Safety and Health for additional information on rating systems.

The NFPA and HMIS systems of using words, pictures, symbols, or combinations are shown at the end of this chapter.

---

**16.07 LABELING OF HAZARDOUS MATERIALS CONTAINERS**

All hazardous materials that are received for Caltrans use must be labeled, marked, or placarded in accordance with U. S. Department of Transportation regulations. The original label markings will be maintained in a clean and legible condition as long as the container could be re-shipped or transported to another location.

Supervisors are responsible to ensure that every container of hazardous materials is properly labeled, tagged, or marked to identify the contents, the appropriate hazard warnings, and the name and address of the manufacturer.

No container shall be used or stored with a damaged or defaced label. Supervisors and employees are responsible to replace damaged or defaced labels immediately.

Secondary containers; e.g., buckets, cans, pitchers, etc., must also be labeled, tagged, or marked to identify the hazardous contents, unless the contents are to be used in their entirety during the work shift.

**16.08 INVENTORIES**

Supervisors shall maintain an written inventory listing of all hazardous substances available in the workplace and shall make the list available to all employees. The list shall be updated annually, and whenever new products are introduced.

**16.09 NEW MATERIALS**

All new materials that contain hazardous materials shall not be used until employees have been trained in the proper use, handling, and disposal of the material, and their supervisor has reviewed the Material Safety Data Sheet (MSDS) covering the specific substance with them. Employees must also be trained in the hazards, protective equipment and symptoms of over exposure for the material.

New materials that have not been approved for use through the Department's "New Products Evaluation" process will not be used.

Contact Engineering Service Center, Materials Evaluation and Testing Services (formerly Translab) for additional information, or contact Headquarters or District Safety and Health Offices for assistance.

---

**16.10 MATERIAL SAFETY DATA SHEETS (MSDS)**

Material Safety Data Sheet (MSDS) are prepared by manufacturer's and suppliers of products that contain hazardous materials. The MSDS is provided to the users of the product to ensure that they have the necessary information to use the product safely, and are fully informed of the associated risks and hazards.

Caltrans supervisors are required to maintain copies of MSDS's for the hazardous materials used at each workplace, in a printed format that is readily accessible to employees. MSDS documents shall also be available to designated representatives and the employee's physicians.

NOTE:

The State warehouse will provided MSDS's for hazardous materials supplied by them.

Material Safety Data Sheets include the following information:

- The chemical identity of the hazardous ingredients.
- The other ingredients if it is a mixture.
- The manufacturer's name, address, and telephone number.
- Physical and chemical properties of the substance.
- The hazardous reactivity, or how the chemical/product will react in a fire or explosion.
- Health hazard information, including emergency first aid procedures in the event of exposure, and progressive symptoms.
- Information regarding personal protective equipment required while using the product.
- Storage, spill, and waste disposal procedures.
- Directions for shipping and transporting.
- Whether the hazardous ingredients are classified carcinogens or potential carcinogens.
- Routes of entry into the body.

The supervisor will maintain a file of relevant MSDS's at the place where employees report to work, or at the workplace. Traveling crews shall carry the relevant MSDS's with them. MSDS files shall be kept current; new or updated MSDS's will be added immediately.

NOTE:

For Herbicides and Pesticides, the product label and the MSDS are required on the job site.

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**16.11 TRAINING**

All employees who work with hazardous materials shall be trained at the time of their initial assignment, and whenever a new hazardous material is introduced.

The required training consists of two (2) parts; general training provided by the Safety and Health Office or others, to provide information about the program labeling systems and MSDS's, and specific training provided by the supervisor on the particular dangers and characteristics of the hazardous materials that the employee will be exposed to. In particular:

**General training shall include:**

- Caltrans Hazardous Materials Communication Program;
- Material Safety Data Sheets (MSDS);
- labeling requirements;
- employee's rights;
- location and availability of this chapter;
- personal protection equipment (types and uses);
- detection of hazardous materials leaks and releases;
- proper storage and handling; and
- emergency spill, accident, and fire procedures.

The General training shall be renewed every two (2) years. Record this training on a standard Form 300, use G # 21820.

**Specific training shall include:**

- Material Safety Data Sheet (MSDS);
- labeling requirements;
- physical and health hazards;
- warning properties and symptoms of exposure;
- appropriate work practices;
- personal protective equipment necessary;
- emergency spill, accident, and fire procedures; and
- how the materials are used by Caltrans.

This category of training will be provided continuously so that employees are trained on all products they use. Record "specific" type training on a "tailgate" safety meeting report or equivalent form.

**Specific training for infrequent or non-routine tasks:**

Supervisors of employees performing infrequent or non-routine tasks which may involve exposure to hazardous materials shall hold a "tailgate safety meeting" to review the hazards before starting the work.

**Training records:** Supervisors shall maintain records for three (3) years to show that each employee has been trained regarding the hazardous materials they use or to which they are exposed.

\* \* \* \* \*

## NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) SYSTEM

**HEALTH HAZARD—BLUE**

**4** Materials which on very short exposure could cause death or major residual injury even though prompt medical treatment were given.

**3** Materials which on short exposure could cause serious temporary or residual injury even though prompt medical treatment were given.

**2** Materials which on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given.

**1** Materials which on exposure would cause irritation but only minor residual injury even if no treatment is given.

**0** Materials which on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

**FIRE HAZARD—RED**

**4** Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature, or which are readily dispersed in air and which will burn readily.

**3** Liquids and solids that can be ignited under almost all ambient temperature conditions.

**2** Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

**1** Materials that must be preheated before ignition can occur.

**0** Materials that will not burn.

heated under confinement before initiation or which react explosively with water.

**2** Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. Also materials which may react violently with water or which may form potentially explosive mixtures with water.

**1** Materials which in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently.

**0** Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.

**REACTIVITY—YELLOW**

**4** Materials which in themselves are readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures.

**3** Materials which in themselves are capable of detonation or explosive reaction but require a strong initiating source or which must be

**SPECIFIC HAZARD—WHITE**

Oxidizing Properties	Corrosive
Acid	Adverse Reaction with Water
Alkali	Radioactive

## HAZARD INDEX COLOR CODE:

FIRE HAZARD	=	RED BACKGROUND, BLACK LETTERS
HEALTH HAZARD	=	BLUE BACKGROUND, WHITE LETTERS
REACTIVITY	=	YELLOW BACKGROUND, BLACK LETTERS
SPECIFIC HAZARD	=	WHITE BACKGROUND, BLACK LETTERS

NOTE:

MAY ALSO BE WRITTEN:

<b>X</b>	<b>X</b>	<b>X</b>
HEALTH HAZARD	FIRE HAZARD	REACTIVITY

**“X” REPRESENTS HAZARD INDEX NUMBERS (4,3,2,1,0)**




































































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**HAZARDOUS MATERIALS COMMUNICATION PROGRAM**

**THIS SPACE AVAILABLE FOR NOTES:**

## HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

## HAZARD INDEX

Hazardous Materials Identification System																							
HMIS®																							
<b>HAZARD INDEX</b> <b>4 Severe Hazard</b> <b>3 Serious Hazard</b> <b>2 Moderate Hazard</b> <b>1 Slight Hazard</b> <b>0 Minimal Hazard</b>  <b>PRODUCT NAME</b>  <b>HEALTH</b> <input type="checkbox"/> <b>FLAMMABILITY</b> <input type="checkbox"/>  <b>REACTIVITY</b> <b>PERSONAL PROTECTION</b> <input type="checkbox"/>	<b>PERSONAL PROTECTION INDEX</b>  <b>A</b>   <b>B</b>  +   <b>C</b>  +  +   <b>D</b>  +  +   <b>E</b>  +  +   <b>F</b>  +  +  +   <b>G</b>  +  +   <b>H</b>  +  +  +   <b>I</b>  +  +   <b>J</b>  +  +  +   <b>K</b>  +  +  +   <b>X</b> Ask your supervisor for specialized handling directions																						
	<table border="0"> <tr> <td>Safety Glasses</td> <td>Face Shield</td> <td>Splash Goggles</td> <td>Airline Hood or Mask</td> <td>Gloves</td> <td>Synthetic Apron</td> <td>Dust Respirator</td> <td>Vapor Respirator</td> <td>Dust &amp; Vapor Respirator</td> <td>Full Suit</td> <td>Boots</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Safety Glasses	Face Shield	Splash Goggles	Airline Hood or Mask	Gloves	Synthetic Apron	Dust Respirator	Vapor Respirator	Dust & Vapor Respirator	Full Suit	Boots											
Safety Glasses	Face Shield	Splash Goggles	Airline Hood or Mask	Gloves	Synthetic Apron	Dust Respirator	Vapor Respirator	Dust & Vapor Respirator	Full Suit	Boots													
																							

NOTE:

- HAZARD INDEX NUMBER: 4,3,2,1,or 0 must be written in box next to hazard index.
- HAZARD INDEX COLOR CODE:

HEALTH	=	BLUE BACKGROUND, WHITE LETTERS
FLAMMABILITY	=	RED BACKGROUND, WHITE LETTERS
REACTIVITY	=	YELLOW BACKGROUND, BLACK LETTERS
PERSONAL PROTECTION	=	WHITE BACKGROUND, BLACK LETTERS



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**HAZARDOUS MATERIALS COMMUNICATION PROGRAM**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 17

## MOTOR VEHICLE SAFETY

### **GUIDELINES FOR SAFE MOTOR VEHICLE OPERATION**

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# CHAPTER 17

## MOTOR VEHICLE SAFETY

### **GUIDELINES FOR SAFE MOTOR VEHICLE OPERATION**

#### **17.00 INTRODUCTION**

This chapter covers information to promote safe motor vehicle operation for employees who operate a State-owned, rented, and privately-owned motor vehicle while on official State business.

This chapter does not contain information regarding motor vehicle accidents. See Chapter 18 - MOTOR VEHICLE ACCIDENTS about how to report motor vehicle accidents.

#### **17.01 PURPOSE**

The purpose of this chapter is to explain Departmental policies covering a variety of items relating to safe vehicle operation including; use of seat belt and shoulder harness, driver license requirements, defensive driver training, misuse, and related practices about safe motor vehicle operation.

#### NOTE:

Employees who operate motor vehicles while on state business are required to possess reasonable knowledge and understand the provisions of the California Vehicle Code (CVC) governing the operation of vehicles upon the highways, and have a knowledge and understanding of traffic signs and signals, including bikeway signs, pavement markings and delineation, and other traffic control devices.

#### **17.02 POLICY STATEMENT**

Every employee who drives a motor vehicle on official State business shall possess a valid California Driver License appropriate to the type of vehicle(s) operated and possess reasonable knowledge and understand the provisions of the California Vehicle Code (CVC) governing the operation of vehicles upon the highways.

### **17.03 VEHICLE INSPECTIONS**

- Pre-operational Inspections

Employees who operate Caltrans vehicles and equipment, and/or Department of General Services fleet vehicles are required to perform a pre-operational (pre-op) inspection to check the readiness of the vehicle before the trip begins.

Employees should visually inspect the inside and the outside of the vehicle and immediately report any defects, deficiencies, or damage. All seat belts and/or shoulder harnesses or similar safety restraint devices shall be inspected during each pre-operational check of the vehicle or equipment.

If problems arise during operation, they should be reported when the vehicle is returned to the pool dispatcher or fleet operator.

Employees with an assigned a vehicle are also required to conduct a pre-operational inspection and arrange for minor servicing including lubrication, oil changes, or other routine services performed at frequencies stated on the manufacturer's service interval records. They are also responsible for the safe operation, condition, and appearance of their assigned vehicle.

See Chapter 18 - MOTOR VEHICLE ACCIDENTS for details about reporting damage.

### **17.04 LAST DRIVER/OPERATOR FAILURE TO REPORT DAMAGE**

It has long been a practice and policy that damage to a State-owned vehicle be reported as soon as possible. Appropriate forms for reporting damage to motor vehicles are explained in Chapter 18 - MOTOR VEHICLE ACCIDENTS of this manual.

However, whenever damage to a State-owned motor vehicle is found during a pre-op inspection and the damage has not been properly or previously reported, the first supervisor to notice is responsible to investigate, and, under normal conditions, the previous driver or operator may be held accountable and subject to appropriate disciplinary action. If a vehicle is damaged because of mistreatment or abuse, an assessment of the damages may be charged against the employee.

Supervisors who fail to enforce the requirements of this policy shall be subject to appropriate disciplinary action.

---

### 17.05 MANDATORY SEAT BELT LAW

It is Departmental policy that whenever an employee operates or is a passenger in a State-owned, privately-owned, or rented vehicle while on official State business, he/she **shall** wear a seat belt and shoulder harness. This includes all vehicles and equipment, vanpool vehicles, and buses used by Caltrans employees.

This Departmental policy is based on the California **mandatory seat belt law** as contained in the California Vehicle Code (CVC) Section 27315(d)(1), which states in part:

“No person shall operate a . . . motor vehicle on a highway unless that person and all passengers . . . are ***properly*** restrained by a safety belt.”

(**Bold type** and *italics* from original CVC text.)

Supervisors shall instruct their employees (drivers/operators and/or passengers) that they must wear their seat belt and shoulder harness while the vehicle is in operation.

The seat belt and shoulder harness shall be used in accordance with the manufacturer's instructions.

The shoulder harness shall be worn over the shoulder and not placed under the arm.

The seat belts and shoulder harnesses are not to be taken off for reasons of personal comfort while the vehicle is in operation.

If a vehicle is equipped with automatic shoulder restraints, the seat (lap) belt must also be fastened. Only vehicles equipped with a single manufacturer's installed seat belt or "lap belt" may be operated without a shoulder harness.

If the seat belt or shoulder harness is non-operational or needs adaptive equipment, the correction should be made prior to use; e.g., when seat belt extensions are needed for large people.

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**17.06 ENFORCING THE USE OF SEAT BELTS AND SHOULDER HARNESSSES**

To ensure compliance with the seat belt policy, supervisors **shall** include discussions about the use of seat belts and shoulder harnesses whenever an employee plans to drive or be a passenger in a vehicle. These discussions can take place during routine staff meetings, or during safety meetings, including “tailgate” safety meetings.

Also to ensure compliance with the seat belt policy, supervisors **shall** make either periodic visual spot checks, or conduct some other method of review/surveillance at all Caltrans facilities and/or work locations.

- **VISUAL SPOT CHECKS**

Visual spot checks to enforce the use of seat belts and shoulder harnesses will mean different things in different work locations:

**Office work locations**

In most office work locations the only practical way to ensure compliance and enforcement of the policy is to include discussions about the use of seat belts and shoulder harnesses during meetings.

It is understood that in an office work setting it is not practical, and it is sometimes difficult, to physically walk to a vehicle and look into the window of the vehicle to confirm the use of seat belts and shoulder harnesses. Supervisors must use some discretion and judgement in their efforts to confirm that employees use their seat belt and shoulder harness.

**Field work locations**

It is understood that it is not practical for field supervisors, and it is sometimes difficult or impossible, to physically walk to a vehicle and look into the window of the vehicle to confirm the use of seat belts and shoulder harnesses.

It is also understood that many field supervisors may not see their employees or have physical contact with their employees every day.

Therefore, like office supervisors, field supervisors must also use some discretion and judgement in their efforts to confirm that employees use their seat belt and shoulder harness.

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- **SUGGESTIONS FOR ENFORCEMENT**

The following suggestions will help supervisors encourage and ensure compliance:

1. Remind employees that it is California State law and Departmental policy that whenever an employee operates a State-owned, privately-owned, or rented vehicle while on official State business, he/she shall wear the seat belt and shoulder harness.
2. Remind employees that statistics show that the accident's severity is more significant when seat belts and shoulder harnesses are not worn.
3. Remind employees about initiating disciplinary action against any employee (supervisor or manager) who fails to comply with the Department's seat belt and shoulder harness policy.
4. Remind employees that injuries and fatalities caused by the failure to wear a seat belt or shoulder harness could result in the denial of benefits including medical and life insurance payments.
5. Remind employees (the driver/operator) that the injury or death of a passenger who did not wear a seat belt and shoulder harness could cause the driver/operator to be given adverse action for failure to enforce the seat belt policy.

Supervisors should refer to the "Caltrans Guide to Employee Conduct and Discipline" for details.

### **17.07 DRIVER LICENSE REQUIREMENTS**

All employees (\* see note) who drive a motor vehicle on State business shall possess a valid California driver's license appropriate to the type of vehicle(s) operated, as defined in Division 6 DRIVERS' LICENSES of the California Vehicle Code (CVC). Employees are responsible that his/her license is renewed on time and is valid whenever they operate a vehicle on State business.

Section 0751 of the State Administrative Manual (SAM) requires supervisors to verify that employees have a valid driver license appropriate for the vehicle(s) being driven.

Supervisors shall ask each employee to show his/her driver's license to verify its expiration date and to ensure the license is valid.

\* See note on next page.



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It is appropriate for supervisors to verify an employee's driver license at any time, or at least annually at the time of issuing an Individual Development Plan and Appraisal Summary, and/or at the time supervisors discuss an employee's probationary report.

\* NOTE:

Employees who work for Caltrans and live in another state are authorized to operate Caltrans vehicles as long as they possess a valid driver's license from their home state.

Supervisors shall verify the employee's driver license in the same manner required for California residents.

#### **17.08 DRIVER LICENSE FEES**

All employees are obligated to pay the fees for their own driver's license except for the medical examination portion for specialized driver's license noted below.

#### **17.09 MEDICAL EXAMINATION FEES FOR DRIVER'S LICENSE**

The Department may pay the fees for the medical examination portion of the driver's license for employees who must have a specialized driver's license (Class A or Class B, require a medical certificate), if provision for such payment is contained in either the collective bargaining agreements or Departmental policy.

Employees should contact their supervisor and/or review the applicable Memorandum of Understanding (MOU) covering their collective bargaining unit for information.

\* \* \* \* \*

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**17.10 EMPLOYEE DRIVING RECORDS**

- **BIT Program and PULL NOTICE Program**

The following information describes how and why Caltrans management receives and handles employee driving records from the Department of Motor Vehicles (DMV).

The California Commercial Motor Vehicle Safety Act of 1988 created a program called the Biennial Inspection of Terminals (BIT) program that is administered by the California Highway Patrol (CHP).

One part of the BIT program requires Caltrans to enroll its employees who operate equipment that requires the possession of a Class A or Class B Driver's License in the Department of Motor Vehicles' program known as the "Pull Notice Program."

Enrollment of Caltrans employees in the DMV Pull Notice Program results in individual employee driving records being sent to the Department once or twice each year depending upon how many employees are enrolled under a single requestor code. Notices are sent yearly over 500 enrollees and biannual for less than 500 enrollees, or whenever there is activity on the employee's driving record.

Upon receipt of an employee's driving record, the District, Service Center, or Headquarters Pull Notice Coordinator will notify the employee's supervisor of any activity that warrants further review or discussion, as defined in Section 1808.1 of the CVC.

Within Caltrans there are three (3) groups of employees who are enrolled in the DMV Pull Notice Program:

1. Employees whose classification requires the possession of a valid driver's license of the appropriate class as a minimum requirement. This group includes most Caltrans Maintenance classifications.
2. Employees who are enrolled as a result of the BIT program. This group includes employees who operate equipment that requires a Class A or Class B Driver's License.
3. Employees who are eligible for a safety incentive award that has a criteria which includes a provision about not having received a citation for a motor vehicle code violation. This group of employees is identified in the collective bargaining agreements containing such provisions.

---

Driving records of an employee enrolled in the BIT program, or from the DMV Pull Notice Program, shall also be maintained in the office of the employee's supervisor.

Enrollment of an employee in the DMV pull notice program will be terminated upon the employee's separation from the Department. Supervisors should notify the Pull Notice Coordinator of changes.

Employees who work for Caltrans and live in another state may operate vehicles and equipment as long as they possess a valid drivers license from their home state. Employees in this category do not appear in the DMV Pull Notice Program.

### **17.11 DEFENSIVE DRIVER TRAINING**

The Department of General Services, Office of Risk and Insurance Management, approves and develops statewide driver training courses. Videotapes present material that asks students for their solutions to various vehicle collision situations. Subjects include avoidance techniques, reducing risks, defensive driving practices, and driver attitudes. The course refreshes the driver's memory of forgotten practices, shows good driver practices, teaches new practices, and vision control.

The State Administrative Manual (SAM) represents the legal basis for requiring State agencies to provide defensive driver training programs to their employees. Consistent with Caltrans commitment to providing a safe and healthy workplace, all qualifying employees are required to attend defensive driver training programs.

Section 0751 of the State Administrative Manual (SAM) states that **frequent drivers** shall attend and successfully complete a defensive driver training course at least once every four (4) years.

For the purpose of the Caltrans Defensive Driver Training, **frequent drivers** include employees who drive a State vehicle, privately-owned, or rental vehicle on official State business under the following definitions:

- **For Field Work Assignments**

**Frequent drivers** in field work assignments is any employee assigned to one of the following Programs; Maintenance\*, Structures, Surveys, Equipment, Construction, or any other Program work activity that would be considered as "field work" or a "field assignment."

- Some Maintenance Program employees who attend the Maintenance Equipment Training Academy (META) may be exempt from attending the Department of General Services sponsored defensive driver training program. Maintenance managers and supervisors should contact the Maintenance Program Managers office for details.

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- **For Office Work Assignments**

**Frequent driver** in office work assignments is any employee who regularly drives a State vehicle, privately-owned, or rental vehicle at least once a week, or fifty (50) times a year, on official State business.

All other employees (field or office assignment) who do not fall within the **frequent driver** definitions are not required to attend defensive driver training.

In addition to the defensive driver training described above, SAM Section 0751, states that employees who have a record of traffic violations and/or accidents shall attend defensive driver course at least once every two (2) years.

Employees who fall into this category and/or exhibit or continue to exhibit poor driving skills should be required to attend special driver-instructor training courses.

Managers and supervisors are responsible to ensure that qualifying employees are enrolled, attend, and successfully complete defensive driver training programs.

## **17.12 MISUSE OF STATE-OWNED MOTOR VEHICLES**

Every employee who operates a State vehicle is responsible to operate it in a safe manner and maintain the vehicle according to the manufacturers recommendations. Additionally, employees shall not operate a State vehicle for personal use. Managers, supervisors and employees shall comply with the following guidelines:

The Department of Personnel Administration (DPA) Sections 599.802 defines misuse of a State vehicle as:

- a) when an employee drives or uses a State vehicle for any purpose other than in the conduct of official State business;
- b) when an employee drives to or from their home or the vicinity of their home after completion of the work day without specific approval;
- c) carrying in the vehicle any persons other than those directly involved with official state business, i.e. family members, friends, etc.
- d) mistreatment and abuse.

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Department of Personnel Administration (DPA) Sections 599.803 through 599.806 defines other provisions for actual costs and liability, and penalties for misuse of a State vehicle.

Managers and supervisors shall investigate instances of alleged equipment mistreatment and abuse and take appropriate disciplinary action.

For additional information contact the Personnel Office in the Administrative Service Center in Sacramento.

### **17.13 VEHICLE BACKING POLICY**

Before backing a vehicle, the driver shall visually inspect all sides of the vehicle to observe any obstacles and clearances in the area. This may require the need to exit a vehicle and walk around the vehicle. The driver shall also be alert to the possibility of pedestrian or vehicular traffic, which might enter the backing area.

When two or more employees work together, the driver should ask the other employee to assist by observing the area to the rear of the vehicle before starting the backing movement.

When practicable, vehicles should be parked so a backing movement will not be necessary. If it is necessary to park or stop a vehicle in a position that will require backing, the vehicle should be positioned in a manner that maximizes visibility to the rear and critical areas adjacent to the vehicle.

### **17.14 SECURING LOADS**

The driver/operator is responsible to secure and/or cover all loads and ensure that tools, tool compartments, side gates, and tailgates are secure before the equipment or vehicle is moved. If another employee is assisting in securing the load, the driver/operator is responsible to check the vehicle before the vehicle is moved.

#### NOTE:

See the Maintenance Program, Code of Safe Operating Practices (formerly known as the Division of Maintenance) for more details.

Reference: California Vehicle Code (CVC) Section 23115.

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**17.15 TOWING - Check height, secure hitch, and safety chain**

The driver/operator is responsible to check the height, secure the trailer, trailer hitch, safety chains, and attachments before the equipment or vehicle is moved. If another employee is assisting in securing the trailer, the driver/operator is responsible to check the vehicle before the vehicle is moved.

NOTE: See the Maintenance Program (formerly Division of Maintenance) Code of Safe Operating Practices for more details.

Reference: California Vehicle Code (CVC) Sections 29000 – 29009, et al.

**17.16 AMBER WARNING LIGHTS**

Section 25256 of the California Vehicle Code (CVC) allows Caltrans vehicles to display flashing/rotating amber warning lights, ". . . when such vehicles are parked or working on the highway."

Amber lights should only be used to alert traffic of workers on foot or operations near the traveled way. Do not use amber warning lights while driving, when parked in an established lane closure, or when no danger to the employee or motorist exists. Misuse and overuse of these warning lights seriously reduces their effectiveness. When working during the hours of darkness, use the amber lights with discretion. Do not blind or distract traffic needlessly. At times, the emergency flashers of the vehicle may be more effective.

**17.17 PARKING AND/OR STOPPING ALONG STREETS AND HIGHWAYS**

When parking and/or stopping on the shoulder area of a highway, and the vehicle will not be used as a physical barrier, always park the vehicle as far off the paved shoulder area as possible. Choose a location carefully, so the vehicle will not affect passing traffic, and will not interfere with employee sight distances.

Where possible, park motor vehicles in a manner that will minimize exposure to moving vehicular traffic and provide a physical barrier between employees and any traffic that may enter the work zone.

**17.18 DISABLED VEHICLE PROCEDURES**

All State-owned vehicles are provided with a directory listing of who and where to call in the event the vehicle becomes disabled.

Never leave a disabled vehicle where it may block the normal movement of traffic. Always attempt to move the disabled vehicle off the roadway for diagnosis of the problem as well as repairs. If necessary, have the vehicle towed to a safe location.

**17.19 PARKING A STATE VEHICLE AT HOME**

Whenever an employee uses a state-owned (Caltrans or General Services fleet) vehicle and is required to keep the vehicle overnight at his/her private residence, the state vehicle shall be locked and parked off the street. It may be parked in the employee's garage or driveway or at some other location where the vehicle is removed from the public street. This will reduce the hazard of accidental damage, theft, or vandalism to the vehicle.

Supervisors are responsible to advise their employees of the requirement to park a state vehicles "off-street" unless permitted otherwise.

**17.20 USE OF PRIVATELY-OWNED MOTOR DRIVEN VEHICLES****17.20 (a) Automobiles, pickup trucks, and vans**

Employees who want to drive a privately-owned vehicle on official state business must have approval from their supervisor before using their private vehicle and before they request reimbursement for expenses.

Employees must submit a Form FA 0205A, "AUTHORIZATION TO USE PRIVATELY-OWNED VEHICLES ON STATE BUSINESS," to their supervisor for approval on an annual basis.

The supervisor shall retain the original copy of the form for mileage rate verification when approving Travel Expense Claim reimbursement for personal vehicle used on state business. See the State Administrative Manual (SAM), Section 0753 for more information.

The employee should retain a copy of the approved form for his or her own record.

It must be understood that to drive a privately-owned vehicle on state business is a privilege which may be denied, suspended, or revoked.

A sample of Form FA 0205A, AUTHORIZATION TO USE PRIVATELY OWNED-VEHICLES ON STATE BUSINESS, is shown at the end of this chapter.

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**17.20 (b) Motorcycles, mopeds, motor-driven cycles, and motorized bicycles**

**Privately-owned motorcycles, mopeds, motor-driven cycles, and motorized bicycles as defined in the California Vehicle Code (CVC) are NOT authorized as a means of transportation in the conduct of any official Caltrans business.**

Employees are prohibited from using motorcycles, mopeds, motor-driven cycles, and motorized bicycles on official Caltrans business. Further, employees cannot submit travel expense claims for using motorcycles, mopeds, motor-driven cycles, and motorized bicycles.

The State Administrative Manual (SAM) Section 0759, and the Department of Personnel Administration (DPA) Rule 599.626(f) **prohibit** any reimbursement for mileage and/or transportation expenses for motorcycles, mopeds, motor-driven cycles, and motorized bicycles.

Employees who violate this policy may be subject to disciplinary action. If an employee is injured in an accident, while in violation of this policy, he/she may be denied workers' compensation and related benefits.

\* \* \* \* \*



JULY 1996

17-16

**AUTHORIZATION TO USE PRIVATELY-OWNED VEHICLE ON STATE BUSINESS****FORM FA 0205A**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**AUTHORIZATION TO USE PRIVATELY-OWNED VEHICLES ON STATE BUSINESS**  
FA-0205A (REV. 1/97) CT# 7541-1521-0

**PERSONAL INFORMATION NOTICE**

Pursuant to the Federal Privacy Act (P.L. 93-579) and the Information Practices Act of 1977 (Civil Code Sections 1798, et seq.), notice is hereby given for the request of personal information by this form. The requested personal information is voluntary. The principal purpose of the voluntary information is to facilitate the processing of this form. The failure to provide all or any part of the requested information may delay processing of this form. No disclosure of personal information will be made unless permissible under Article 6, Section 1798.17 of the IPA of 1977. Each individual has the right upon request and proper identification, to inspect all personal information in any record maintained on the individual by an identifying particular. Direct any inquiries on information maintenance to your IPA Officer.

**NOTE:** Instructions on back of form

NAME (Print) LAST	FIRST	INITIAL	SOCIAL SECURITY NUMBER	B. U. NUMBER
				<input type="checkbox"/> E <input type="checkbox"/> M <input type="checkbox"/> S <input type="checkbox"/> C

**IN ACCORDANCE WITH STATE POLICY (S.A.M. 0754), APPROVAL IS REQUESTED TO USE  
MY PRIVATELY OWNED VEHICLE (S) TO CONDUCT OFFICIAL STATE BUSINESS.**

MAKE	YEAR	MODEL	LICENSE NUMBER	ENTER MILEAGE RATE REQUEST

**I HEREBY CERTIFY** that whenever I drive a privately-owned vehicle on State Business I will have a valid driver's license in my possession, all persons in the vehicle will wear safety belts and the vehicle shall always be:

- |   |  |
|---|--|
| 1. Covered by liability insurance for the minimum amount prescribed by state law.<br>\$15,000 for personal injury to or death of one person; \$30,000 for injury to or death of two or more persons in one accident, \$5,000 property damage.<br>Employees must be able to show evidence of auto liability insurance coverage currently in force. (State Financial Responsibility Act, Chapter 1322, 1985.) | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 2. Adequate for the work performed.   | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 3. Equipped with seat belts in operating condition.   | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| 4. To the best of my knowledge, in safe mechanical condition, as required by law.   | <input type="checkbox"/> YES <input type="checkbox"/> NO |

**NOTE:** COLLISION INSURANCE IS NOT REQUIRED, BUT THE STATE CANNOT REIMBURSE AN EMPLOYEE FOR DAMAGE SUSTAINED TO THEIR PRIVATE VEHICLE WHILE IN USE ON STATE BUSINESS IF THE EMPLOYEE CHOOSES NOT TO MAINTAIN COLLISION INSURANCE UNDER THE PROVISIONS OF DPA RULE 599.630.

*I agree that while using my privately-owned vehicles on official State business, all accidents will be reported on State Form 270 within 48 hours (SAM 2441). I understand that permission to drive a privately-owned vehicle on State business is a privilege which may be suspended or revoked at any time. For mileage reimbursement rates which exceed the State minimum rate, I certify that the actual cost of operating the vehicle was equal to or greater than the rate claimed.*

EMPLOYEE RESIDENCE ADDRESS	ONE WAY MILEAGE RESIDENCE TO HEADQUARTERS
EMPLOYEE SIGNATURE	WORK PHONE NUMBER
	DATE

**APPROVAL**

USE OF A PRIVATELY-OWNED VEHICLE TO CONDUCT OFFICIAL STATE BUSINESS IS APPROVED  
IN ACCORDANCE WITH S.A.M. SECTION 0754.

SIGNATURE OF AUTHORIZATION-CURRENT SUPERVISOR	PRINT NAME	DATE	BUSINESS PHONE

**Prepare in Duplicate:**

White - Supervisor

Yellow - Employee

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# CHAPTER 18

## MOTOR VEHICLE ACCIDENTS

### HOW TO REPORT, DOCUMENT, AND CLASSIFY MOTOR VEHICLE ACCIDENTS

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# CHAPTER 18

## MOTOR VEHICLE ACCIDENTS

### HOW TO REPORT, DOCUMENT, AND CLASSIFY MOTOR VEHICLE ACCIDENTS

#### 18.00 INTRODUCTION

This chapter provides all the necessary details to report and document motor vehicle accidents. It explains the forms and reporting procedures that the driver or operator, and his/her supervisor, or responsible person in the chain-of-command, are responsible to do following a motor vehicle accident.

#### 18.01 PURPOSE

The purpose of this chapter is to ensure uniform reporting and documentation of motor vehicle accidents, and has been divided into two (2) parts as follows:

**Part 1. Reporting Motor Vehicle Accidents** describes the sequence of events that the driver or operator, and the supervisor is responsible to do following a motor vehicle accident. It also includes a complete description of the forms required to document motor vehicle accidents.

The reporting requirements described in Part 1. of this chapter are based upon criteria established in the State Administrative Manual (SAM), Department of Motor Vehicles (DMV) Code, the State Compensation Insurance Fund (SCIF), the Department of General Services, Cal-OSHA, and Caltrans reporting requirements.

**Part 2. Classifying Motor Vehicle Accidents** describes the Caltrans Motor Vehicle Accident Classification System. The definitions are also described on the reverse side of Form PM-S-0270, DATA INPUT FOR MOTOR VEHICLE ACCIDENT.

#### 18.02 POLICY STATEMENT

Whenever an employee is involved in a motor vehicle accident while driving a state-owned, rented, or privately-owned vehicle on official state business he/she shall report the accident on the appropriate forms, and in a timely manner.

**18.03 RESTRICTED ACTIVITIES**

Whenever an employee is involved in a motor vehicle accident while operating a state-owned, rented, or privately-owned vehicle on official state business he/she shall not discuss the accident with anyone other than the police, their supervisor, Office of Risk and Insurance Management, Claims Unit, or an authorized agent under contract with ORIM. If contacted by the other party, their attorney or insurance company, refer the party or correspondence to ORIM Claims Unit.

All communications regarding claims, summons or complaints, must be forwarded to the District Claims Office or District/Headquarters Safety and Health Office who will forward the information to the Department of General Services, Office of Risk and Insurance Management for disposition.

If at any time following the accident, the driver/employee is served with any legal papers, ORIM Claims Unit should be called immediately.

Supervisors and/or employees may contact the District or Headquarters Safety and Health Office for information or assistance.

**18.04 OBTAINING COPIES OF POLICE REPORTS**

Supervisors should obtain copies of accident reports prepared by the California Highway Patrol (CHP) or reports prepared by local police jurisdictions. He or she may obtain these reports as an "interested party" and at no cost. Do not delay submitting a Form STD 270 within 48 hours to ORIM. Police reports and other documents may be obtained at a later date.

Copies of the report(s) shall be given to the District Claims Officer, or District/Headquarters Safety and Health Officer, who will arrange for the police report to be sent to the Department of General Services, Office of Risk and Insurance Management.

**NOTE:**

The Department of General Services, Office of Risk and Insurance Management is the state agency that acts as the Department's insurance adjusting agent in vehicle accident claims and related insurance procedures.

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## **PART 1.**

# **REPORTING MOTOR VEHICLE ACCIDENTS**

### **18.1-1 OVERVIEW OF REPORTING and DECISION MAKING RESPONSIBILITIES**

The following describes what the driver or operator, and the supervisor of his/her chain-of-command, is responsible to do following a motor vehicle accident.

- **By the Driver or Operator**

1. Report all motor vehicle accidents and/or property damage accidents to his/her supervisor as soon as possible.
2. Complete the Form STD. 269, ACCIDENT IDENTIFICATION at the scene. See section 18.1-3 for more details.
3. Complete the Form STD. 270 VEHICLE ACCIDENT REPORT as soon as possible after the accident. The Form STD. 270 must be mailed within 48 hours after the accident. See Section 18.1-4 for more details.

- **By First-Line Supervisor**

1. Ensure all motor vehicle accidents are promptly investigated, documented, and properly reported to their chain-of command and the Safety Office.
2. Ensure the employee understands when and how to complete the Form STD. 269 and Form STD. 270. Should the driver be unable to do so, the supervisor shall fill out the form(s).
3. Review the completed Form STD. 270, VEHICLE ACCIDENT REPORT, analyze the information, determine the basic cause, and sign as Reviewing Officer.
4. Check the driving history of the affected employee to see if he/she has had any recent accidents that may influence the supervisor's decision to consider training or other appropriate action.
5. Complete the Form PM-S-0270, DATA INPUT FOR MOTOR VEHICLE ACCIDENT. Make comments regarding appropriate corrective action taken to prevent similar accidents, determine and assign "preventability".

6. According to the facts, assign the accident an appropriate accident classification based on the definitions in the Caltrans Vehicular Accident Classification system described in Part 2 of this chapter.
7. Obtain and forward a copy of all law enforcement reports regarding the accident. **Do not** delay sending in the Forms STD. 270 and PM-S-0270 while waiting for the police report.

NOTE:

The supervisor or person having charge over the state vehicle is responsible to complete STD 270 for acts of vandalism or damage sustained while parked if vehicle was not currently assigned to other employee at the time of damage.

• **By Second-Line Supervisor**

1. Review Form STD. 270, VEHICLE ACCIDENT REPORT, and Form PM-S-270, DATA INPUT FOR MOTOR VEHICLE ACCIDENT for completeness, appropriate classification and any corrective action.
2. Discuss the driving history of the affected employee with the first-line supervisor to see if he/she has had any recent accidents that may impact supervisor's decision to consider training or other appropriate action.
3. Forward the original copy of the Form STD. 270, and the Form PM-S-0270, to the District Safety and Health Office for accidents involving District employees, and to the Headquarters Office of Safety and Health for employees assigned to Headquarters sourced units. **If he/she is an Equipment Shop employee, send the original directly to the Headquarters Safety Office and a copy to the appropriate District Safety Office.**

• **By District or Headquarters Safety and Health Officer**

1. Review the Form STD. 270, VEHICLE ACCIDENT REPORT, analyze the information, and determine the basic cause of the accident.
2. Review the accident classification decision by the first and second-line supervisors to ensure it is appropriate, correct, and "preventability" has been determined and assigned.

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NOTE:

The Chief, Office of Safety and Health and the District Safety Officers have final authority to determine the accident classification and “preventability” assigned to any accident or to any employee.

3. Notify the second-line supervisor if there is disagreement about an accident classification, and/or “preventability” he/she may have selected and assigned to a specific accident. An assigned classification for any accident should be reconsidered and/or changed to be consistent with the Caltrans Vehicular Accident Classification system.
4. Prepare and/or cooperate with notifying the employee if the accident classification is determined to be “preventable” and the employee may be denied benefits and/or awards.
5. The District or Headquarters Office of Safety and Health staff will arrange for the reports to be sent to the Department of General Services, Office of Risk and Insurance Management. This state agency acts as the Department’s insurance adjusting agent in vehicle accident claims and related insurance procedures.

\* \* \* \* \*



**18.1-2 OVERVIEW OF REQUIRED FORMS**

The Department of General Services provides two (2) standard forms, used by all state agencies and departments, to record information about motor vehicle accidents and associated personal injuries and property damage.

The State Compensation Insurance Fund (SCIF), Cal-OSHA, and Caltrans management also have mandatory requirements for reporting, documenting, and maintaining statistical data about motor vehicle accidents, the personal injuries, and property damage that is typically associated with them.

Additionally, Caltrans has a computer data base entry form to record and retrieve statistical data about motor vehicle accidents and related personal injuries and property damage. The Caltrans system is known as the "Safety Information Management System" or "SIMS."

The following briefly describes the three (3) forms used to record motor vehicle accident data and the sequence in which they are normally used:

**1. Form STD. 269**

The Form STD. 269, "ACCIDENT IDENTIFICATION CARD" is designed to provide a quick easy way to record basic information about the accident while at the accident scene.

**2. Form STD. 270**

The Form STD. 270, "VEHICLE ACCIDENT REPORT" is the official form used to document the specific details about the accident and is usually completed when the driver or operator returns to their office.

**3. Form PM-S-0270**

This Form PM-S-0270, "DATA INPUT FOR MOTOR VEHICLE ACCIDENT" is a computer input document.

The supervisor, using information taken from the Form STD. 270 and their own investigation completes the Form PM-S-0270.

The Safety and Health staff will review the form for completeness and accuracy, then enter the factual information about the motor vehicle accident, and associated personal injury and property damage into the SIMS computer data base.

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**18.1-3 HOW TO USE FORM STD. 269****"ACCIDENT IDENTIFICATION CARD"**

The Form STD. 269 ACCIDENT IDENTIFICATION CARD is a state form required by the Department of General Services, Office of Risk and Insurance Management (ORIM), and Caltrans management.

The Caltrans driver must complete a Form STD. 269 for all motor vehicle and/or motorized equipment accidents regardless of the ownership of the vehicle at the accident scene and the amount of damage.

The purpose of the Form STD. 269 is to record pertinent information about the accident while still at the accident scene. The information on the Form STD. 269 is transferred onto a Form STD. 270. Within 48-hours, the accident must be reported to ORIM by mail or FAX on a Form STD. 270.

A copy of a Form STD. 269 should be located in the storage (glove) compartment of every state-owned vehicle. The form is an eight-sided, folded card, about 4 inches by 6 inches, printed back-to-back.

The Form STD. 269 is NOT a substitute for completing a Form STD. 270. See Section 18-1.4, HOW TO USE FORM STD. 270, VEHICLE ACCIDENT REPORT.

If the accident causes an injury to persons (other than a Caltrans employee), or involves damage to the property of others, the Caltrans driver must immediately call the Office of Risk and Insurance Management.

If an accident occurs on weekends or on holidays, it must be reported as soon as possible, but it is reported to a different state telephone number. Public, CALNET, and FAX telephone numbers are shown on the form.

**NOTE:**

Do not discuss the accident with anyone other than the police, a supervisor, Office of Risk and Insurance Management Claims Unit, or an authorized agent under contract with ORIM. If contacted by the other party, their attorney or insurance company, refer the party or correspondence to ORIM Claims Unit.

If at any time following the accident, the driver/employee is served with any legal papers, ORIM Claims Unit should be called immediately.

Contact the District or Headquarters Safety and Health Office for information or assistance.

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The State Administrative Manual (SAM), Section 2430, requires the employee, or operator of the vehicle, and the supervisor to comply with the following:

- a) The Caltrans driver must complete a Form STD. 269, by recording all pertinent information on the form before leaving the accident scene.

The first section of the form is designed to be detached and given to the driver of the other vehicle or property owner.

When the other party asks questions about insurance coverage, or insurance related questions, the Caltrans driver/operator should tell the other driver/property owner to direct their questions to the Department of General Services, Office of Risk and Insurance Management. Point out to the other party that the address and telephone number of the Office of Risk and Insurance Management, Claims Unit is shown on the card.

- b) The Caltrans driver will transfer the information from the Form STD. 269 to a Form STD. 270 VEHICLE ACCIDENT REPORT.
- c) The Caltrans driver must give the completed Form STD. 269 (and a completed Form STD. 270) to his/her supervisor as soon as possible following the accident.
- d) The supervisor who authorized the Caltrans driver to use the vehicle is responsible to ensure that the Form STD. 269 is filled out completely and accurately.

If the driver is unable to complete the form, the supervisor is responsible to complete the form for the employee, and ensure that the accident is reported to ORIM within 48-hours by mail or FAX on a Form STD. 270. If the supervisor is not available, a co-worker, or other person should ensure that the facts surrounding the accident are recorded on a Form STD. 269, and the form is sent to an appropriate member within the employee's chain-of-command who must report to ORIM within 48-hours by mail or FAX on a Form STD. 270.

After the information is transferred from the Form STD. 269 to the Form STD. 270, the supervisor may retain, or destroy their copy of the Form STD. 269.

The information on the Form STD. 269 should be considered as "confidential" and should be destroyed in the proper manner.

A sample of Form STD. 269, ACCIDENT IDENTIFICATION CARD is shown at the end of this chapter.

**18.1-4 HOW TO USE FORM STD. 270****"VEHICLE ACCIDENT REPORT"**

The Form STD. 270 VEHICLE ACCIDENT REPORT is a state form required by the Department of General Services, Office of Risk and Insurance Management (ORIM), and Caltrans management.

**The most current version of the Form STD. 270 is available from supervisors, District or Headquarters Safety and Health Offices and the Caltrans Electronic Forms System on the Caltrans Intranet.**

The Caltrans driver must complete a Form STD. 270 for all motor vehicle and/or motorized equipment accidents regardless of the ownership of the vehicle at the accident scene, amount of damage, or repair cost. A separate STD 270 must be completed for each state vehicle involved or damaged.

Within 48-hours, the accident must be reported to ORIM by mail or FAX on a Form STD. 270, VEHICLE ACCIDENT REPORT.

If the accident causes an injury to persons (other than a Caltrans employee), or involves damage to the property of others, the Caltrans driver must immediately call the Office of Risk and Insurance Management.

If an accident occurs on weekends or on holidays, it must be reported as soon as possible, but it is reported to a different state telephone number. Public, CALNET, and FAX telephone numbers are shown on the form.

Supervisors should obtain copies of accident reports prepared by the California Highway Patrol (CHP) and/or reports prepared by local police jurisdictions. He or she may obtain these reports as an "interested party" and at no cost. Do not delay submitting a Form STD. 270 within 48 hours to ORIM. Police reports and other documents may be obtained at a later date.

NOTE:

Do not discuss the accident with anyone other than the police, his/her supervisor, Office of Risk and Insurance Management, Claims Unit, or an authorized agent under contract with ORIM. If contacted by the other party, their attorney or their insurance company, direct the party or correspondence to ORIM Claims Unit.

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If at any time following the accident, the driver/employee is served with any legal papers, ORIM Claims Unit should be called immediately.

Contact the District or Headquarters Safety and Health Office for information or assistance.

The State Administrative Manual (SAM), Section 2440 requires the employee, or operator of the vehicle, and the supervisor to comply with the following:

- a) The Caltrans driver must complete a Form STD. 270.  
(All pertinent information is transferred from the Form STD. 269 to the Form STD. 270.) See Section 18-1.3, HOW TO USE FORM STD. 269, ACCIDENT IDENTIFICATION CARD.

All pertinent facts related to the accident must be clearly written on the form so the information will be understood by any person who was not a witness or not at the accident scene.

- b) The Caltrans driver must give a completed Form STD. 270 to his/her supervisor as soon as possible following the accident.
- c) The supervisor who authorized the Caltrans driver to use the vehicle is responsible to ensure that the Form STD. 270 is filled out completely and accurately.

If the driver is unable to complete the form, the supervisor is responsible to complete the form for the employee and ensure that the accident is reported to ORIM within 48-hours, by mail or FAX on a Form STD. 270. If the supervisor is not available, a co-worker, or other person should ensure that the facts surrounding the accident are recorded on a Form STD. 269, and the form is sent to an appropriate member within the employee's chain-of-command who must report to ORIM within 48-hours, by mail or FAX on a Form STD. 270.

- d) The supervisor of the Caltrans driver involved in an accident must investigate the accident.

The investigation will enable the supervisor to co-sign the VEHICLE ACCIDENT REPORT, Form STD. 270.

A sample of Form STD. 270, VEHICLE ACCIDENT REPORT is shown at the end of this chapter.

**18.1-5 HOW TO USE FORM PM-S-0270****"DATA INPUT FOR MOTOR VEHICLE ACCIDENT"**

This is a Caltrans computer input document and is the last official document required in the sequence of events following a motor vehicle accident.

The form must be filled out to ensure that an accident has been properly classified, documented, and included in the SIMS computer data base. The form is only for internal Departmental use by the District/Headquarters Safety and Health Office staff.

**NOTE:**

A separate Form PM-S-0270 must be completed for each state vehicle involved or damaged.

The purpose of the "Data Input For Motor Vehicle Accident" form is:

- To collect data that will identify the employee, the equipment, and detailed information describing the physical and environmental conditions surrounding the accident by establishing a computer file.
- To document the Accident Prevention Plan (shown on the reverse side) by having the supervisor and others review and discuss the details of the accident with the driver to select the basic cause.
- To document the preventability of the accident based upon Caltrans Vehicular Accident Classification Standards.

The following provides an explanation on how to file a Form PM-S-0270:

- 1) Based upon the information provided by the driver/operator, and after completing an investigation, the first-line supervisor fills out the front of the form. All boxes describing physical and environmental conditions must be completed.
- 2) Supervisors are responsible to ensure that all of the data fields have been reviewed and all the information on the computer input document is complete and accurate. Call your local Safety and Health Office if you need assistance.

- 3) After completing the front of the form, the first-line supervisor shall review the back side of the form and select the appropriate accident classification that best fits the circumstances surrounding the accident.
- 4) After selecting the accident classification, the first-line supervisor shall complete the lower section of the form by filling out the Accident Prevention Plan as shown on the reverse side of the form.
- 5) The second-line supervisor shall review the first-line supervisor's comments and indicate his/her agreement or disagreement with the first-line supervisor's recommendation. Subsequent levels of review shall include the District/Headquarters Safety and Health Officer.

**A sample of Form PM-S-0270 is shown at the end of this chapter. The most current version of the Form PM-S-270 is available from District or Headquarters Safety and Health Offices and the Caltrans Electronic Forms System on the Caltrans Intranet.**

\* \* \* \* \*

**18.1-6 REIMBURSEMENT FOR DAMAGE TO PRIVATELY-OWNED VEHICLE**

The Department of Personnel Administration (DPA) Rules, Sections 599.630 and 599.631 allows state employees to claim reimbursement for actual repair expenses incurred as a result of a collision or other accidental damage to their privately-owned vehicle if:

1. The damage occurred while the vehicle was used on official state business; and
2. The vehicle was damaged through no fault of the employee; and
3. The amount claimed is an actual loss to the employee, and is not recoverable directly from or through the insurance coverage of any party involved in the accident; and
4. The loss claim does not result from a decision of the employee not to maintain collision coverage; and
5. The claim is processed in accordance with the procedures prescribed by the Department of General Services, Office of Risk and Insurance Management.

Employees submitting a claim for reimbursement of repairs should discuss the accident with their supervisor and then contact their local Accounting Office for information and filing requirements. An employee submitting a claim for reimbursement of repair expenses must:

1. File a Travel Expense Claim (TEC), Form FA-0302.
2. File a Vehicle Accident Report, Form STD. 270.
3. Attempt to recover all damages through their insurance coverage, collision, comprehensive, or property damage.
4. Attach a copy of the Form STD. 270, signed by the supervisor, and a bill for repairs and/or replacement parts to the Form STD. 270.
5. Enter the following certification statement in the remarks section of the TEC form:

"I hereby certify that this expense was incurred by me as a result of damage to my privately-owned vehicle. This expense is not reimbursed through the insurance coverage of any of the parties involved in the accident."



**18.1-7 PRIVATELY-OWNED VEHICLE INSURANCE RATES**

If an insurance rate has been increased, policy canceled, or policy renewal was refused as a direct result of a work-related accident involving a state-owned vehicle or authorized use of their private vehicle, Caltrans will assist employees as follows.

The Department will assist in obtaining relief from action taken by their insurance carrier when it can be demonstrated that the action taken was a direct result of a work-related accident(s) which was clearly not the fault of the employee.

In order to obtain Departmental assistance, the employee should:

1. Contact their private insurance agent and discuss insurance premium increase, policy cancellation, or refusal of policy renewal. Sometimes an individual's insurance premium is raised simply because new drivers are added to the policy, covered drivers received traffic violations, or because the company raises rates for all policyholders.
2. If it still appears that the increase or cancellation resulted from a work-related vehicle accident(s) where the employee was clearly not at fault and the insurance agent does not obtain relief for the employee, they may discuss the issue with the local Claims Officer.

The District or Headquarters Claims Officer can:

1. Review the driving record and vehicle accident reports of the employee.
2. If warranted, contact the insurance agent and explain the facts to seek relief for the employee.
3. Advise the employee of the results of the contact or the reason why a contact was not made.

Even though the Claims Officer will make a reasonable effort to seek equitable treatment for employees, the Department cannot guarantee relief from the insurance carrier rate increase. Insurance carriers may set their own rates within legal limits, and the Department cannot be held responsible for rate increases, cancellations, or failure to renew private vehicle insurance policies.

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## PART 2.

# CLASSIFYING MOTOR VEHICLE ACCIDENTS

### 18.2-1 MOTOR VEHICLE ACCIDENT CLASSIFICATIONS

The following defines the Caltrans Vehicular Accident Classification system.

For the purpose of this manual, a “motor vehicle” is broadly defined as either a state-owned (Caltrans or General Services), privately-owned, or commercial rental motor vehicle being operated by a state employee while on official state business.

“Equipment” is broadly defined as motorized construction equipment or equipment used in the construction and/or maintenance of highways typically operated by Caltrans.

“Other vehicles” are defined as a non-state employee/adverse party owned vehicle or property involved in an accident resulting in personal injury or property damage.

The following definitions, although in less detail, correspond to the descriptions found on the reverse side of Form PM-S-0270, DATA INPUT FOR MOTOR VEHICLE ACCIDENT.

### 18.2-2 CLASS I-DEFINITIONS

#### **CLASS I (a) STATE VEHICLE INDIRECTLY INVOLVED**

When a motor vehicle or equipment is in the proximity of an accident and it may be alleged that the accident was caused, in whole or in part, to the operation or position of the motor vehicle or equipment.

#### **CLASS I (b) WORK DAMAGE TO OTHERS**

When a vehicle or property owned by others is damaged by being sprayed or by material falling or thrown from a state-owned/operated vehicle or equipment.

### 18.2-3 CLASS II-DEFINITIONS

#### **CLASS II (a) WORK DAMAGE**

Work damage is unavoidable damage to a state vehicle or equipment that occurs during its proper use, but not in the case of a traffic accident.

**NOTE:**

A "Vehicle Accident Report" Form STD. 270, is required for equipment failures that cause an accident such as loading or unloading, towing, equipment failure or glass damaged by sand or an accumulation of scratches, but not for those times in which there is equipment failure or glass damage only.

Class 2, Work Damage will not be used to cover any incident involving damage to property owned by others or resulting in injury to others.

**CLASS II (b) VANDALISM OR THEFT**

Damages as a result of vandalism or theft. This type of incident must be reported on a Form STD. 270, and local law enforcement and the Claims Office in the Districts or Headquarters Legal Office must be notified. A theft without damage must be reported on a "Property Survey Report", as described in the state Administrative Manual (SAM).

**CLASS II (c) OPERATIONAL DAMAGE TO OTHERS**

Damage to an adverse party motor vehicle or property owned by others that occurs during normal and operational use of a Caltrans-owned motor vehicle and/or equipment. Damage to the Caltrans-owned motor vehicle or equipment may or may not occur.

Examples are:

When a buried utility line or facility is damaged during excavation, or when a vehicle or property owned by others is damaged because it is covered or hidden by snow fall or snow pack and is damaged during normal snow removal operations by Caltrans equipment.

**18.2-4 CLASS III-DEFINITIONS**

Any accident which does not fall into Class I or Class II is a Class III accident.

A Class III accident is further defined as an accident in which the state vehicle or equipment was directly involved that may or may not include collision, and one in which injury or property damage occurs to others or to state vehicles or facilities.

**CLASS III PREVENTABLE ACCIDENTS**

A preventable accident is defined as an accident that the driver/operator could have reasonably prevented.

Preventable accidents are caused by driver error or an imprudent act when the state driver/operator fails to take the "**last clear chance**" to avoid the accident. Except for accidents involving mechanical failure, the decision as to whether the accident is preventable is to be based solely on whether or not the driver exercised prudent and careful judgment. Did the driver attempt to avoid the accident regardless of any legal rights (such as right-of-way at intersection) to which he/she may have been entitled under the Vehicle Code?

This interpretation of a preventable accident imposes on each driver the positive duty of doing all that can be done within reason under the particular circumstances to avoid accidents.

The driver is expected to carefully anticipate emergency situations, drive defensively, and to make every possible effort to avoid accidents.

If the driver fails to take the "**last clear chance**" to avoid an accident, the accident is preventable regardless of the question of primary responsibility for the accident. The test to be applied is one of preventability, taking all facts and circumstances under consideration.

**CLASS III NON-PREVENTABLE ACCIDENT**

A non-preventable accident is defined as an accident that occurred with the vehicle/equipment and the state driver or operator did exercise prudent and careful judgment in an attempt to avoid the accident.

Generally, driver error or an imprudent act of the other driver causes these accidents, where the state driver/operator has no control over the acts of others.

**CLASS III ACCIDENT WHILE PROPERLY PARKED**

All properly parked vehicles or equipment are to be considered stationary objects. A properly parked vehicle/equipment is one that is completely stopped and parked where it is legal to do so, or stopped for the purpose of loading or unloading persons or property. Parking at a state facility or on private property is subject to the same regulations as prescribed in the California Vehicle Code.

A vehicle stopped in a traffic lane in response to a traffic control sign or device, or in response to law enforcement direction is not considered parked. If a vehicle is stopped (parked), and has its door struck while the door is open, it is not considered properly parked.



**18.2-5 NOTIFICATION OF CLASS III PREVENTABLE ACCIDENT  
AND THE EMPLOYEE'S RIGHT TO APPEAL**

Employees who are charged with a Class III Preventable accident shall be notified in writing by the District or Headquarters Safety and Health Officer.

Bargaining Unit 12 employees should be informed they have an appeal process described in their Memorandum of Understanding (MOU) because they may be denied benefits and/or awards.

The notice may be prepared by the supervisor, branch chief, region manager, etc.

**ACCIDENT IDENTIFICATION****FORM STD. 269**

NAME STREETS OR ROADS — SHOW TROLLEY TRACKS, DIRECTION AND POSITION OF ALL VEHICLES IN ACCIDENT.				<b>F</b> The S gram to oth the S officia  <b>All ve</b> injury <b>within</b> 270. " and a  Accid emph of oth the C advai  <b>DO</b>		<b>ACCIDENT DATA</b> COUNTY CITY DATE A.M. P.M. LOCATION (ADDRESS, INTERSECTION, ETC.) HOUR DISTANCE FROM CURB APPROXIMATE ROAD WIDTH		STATE OF CALIFORNIA  <b>ACCIDENT IDENTIFICATION</b> STD. 269 (Rev. 5/97)
								<b>IMPORTANT</b>  Complete entries below, detach this card and give to other driver who may need information for financial responsibility form.
DRIVER'S FULL NAME AND WORK TELEPHONE NUMBER								
DRIVER'S LICENSE NUMBER								
DEPARTMENT EMPLOYED BY								
DATE AND LOCATION OF ACCIDENT								
YEAR AND MAKE OF STATE VEHICLE								
LICENSE NUMBER OF STATE VEHICLE								
								
ANY INQUIRY REGARDING ACCIDENT MAY BE ADDRESSED TO								
<b>OFFICE OF RISK AND INSURANCE MANAGEMENT</b> <b>DEPARTMENT OF GENERAL SERVICES</b> 1325 J STREET, SUITE 1800 <b>SACRAMENTO, CA 95814</b> [(916) 322-0459]								
<b>COM</b> <b>C</b>		Subs comn plaint Servi rame of se includ servic						

THIS FORM IS AN EIGHT (8) SIDED, 4"X 6" FOLDED CARD, PRINTED BACK-TO-BACK.  
ALL SIDES OF THE FORM ARE NOT SHOWN.

# MOTOR VEHICLE ACCIDENTS

JULY 1996

18-22

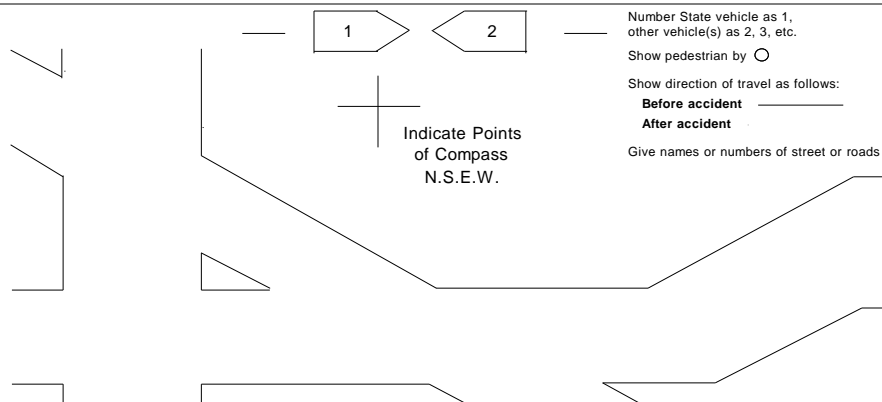
## VEHICLE ACCIDENT REPORT - SIDE 1.

### FORM STD. 270 (Caltrans)

STATE OF CALIFORNIA <b>VEHICLE ACCIDENT REPORT</b> STD. 270 (REV. 03/2000)		THIS REPORT MUST BE MAILED WITHIN 48 HOURS AFTER ACCIDENT (ACCIDENTS INVOLVING INJURY SHOULD BE FIRST CALLED OR FAXED TO ORIM AT (916) 322-0459 - CALNET 492-0459 - FAX (916) 322-6006. <b>* CONFIDENTIAL INFORMATION *</b> DO NOT RELEASE TO OTHER PARTIES WITHOUT CONSENT OF THE OFFICE OF RISK AND INSURANCE MANAGEMENT		DISTRIBUTION: ORIGINAL - <b>District or Headquarters</b> <b>Office of Safety and Health</b>	
ACCIDENT PREVIOUSLY REPORTED TO ORIM? (If yes, give date) <input type="checkbox"/> YES <input type="checkbox"/> NO		Page _____ of _____			
STATE DRIVER	NAME		AGE	EMPLOYING DEPARTMENT <b>CALTRANS -</b>	
	DRIVER'S LICENSE NO.	ACCIDENT DATE	TIME	OFFICE ADDRESS	
	WAS VEHICLE BEING USED ON OFFICIAL STATE BUSINESS? <input type="checkbox"/> YES <input type="checkbox"/> NO <i>(If NO, attach explanation)</i>			AGENCY BILLING CODE  AGENCY DOCUMENT NO. <b>District/Cost Center</b>	
	APPROXIMATE DATE DRIVER LAST COMPLETED STATE DEFENSIVE DRIVER TRAINING <input type="checkbox"/> NOT TAKEN				
STATE VEHICLE	VEHICLE LICENSE NUMBER		VEHICLE YEAR, MAKE, MODEL		VEHICLE OWNER <input type="checkbox"/> DEPT OWNED <input type="checkbox"/> DGS POOL <input type="checkbox"/> RENTAL <input type="checkbox"/> EMPLOYEE OWNED
	BRIEFLY DESCRIBE DAMAGES TO STATE VEHICLE		ESTIMATED REPAIR COST	EQUIPMENT ID NO.	
		IF DEPARTMENT OWNED OR RENTAL, ENTER OWNER'S NAME			
ACCIDENT DETAILS <small>(See Reverse for Diagram and Description)</small>	ACCIDENT LOCATION (Address/Area)			ROAD CONDITIONS	
				WEATHER CONDITIONS	
	(City/State)			TRAFFIC CONDITIONS	
	(County)			HOW FAST WERE YOU DRIVING	EST. SPEED OF OTHER CAR
	POLICE REPORT MADE <input type="checkbox"/> YES <input type="checkbox"/> NO		NAME AND ADDRESS OF INVESTIGATING AGENCY		
	AGENCY <input type="checkbox"/> CHP <input type="checkbox"/> OTHER				
		NCIC#	BADGE #		
OTHER VEHICLE	DRIVER'S NAME		AGE/DOB	VEHICLE LICENSE NO.	VEHICLE YEAR, MAKE, MODEL
	DRIVER'S LICENSE NO.		HOME TELEPHONE	WORK TELEPHONE	No OF PASSENGERS
	DRIVER'S ADDRESS (Street, City, State, Zip Code)			REGISTERED OWNER	
				OWNER'S ADDRESS	HOME TELEPHONE
				WORK TELEPHONE	
BRIEFLY DESCRIBE DAMAGES TO OTHER VEHICLE OR PROPERTY			NAME AND ADDRESS OF OTHER PARTY'S INSURANCE COMPANY		
INJURED	NAME		AGE	ADDRESS	
				HOSPITAL	
WITNESS	NAME		TELEPHONE	ADDRESS	
VEHICLE PASSENGERS STATE OTHER	NAME		ADDRESS		
	NAME		ADDRESS		
	NAME		ADDRESS		
	NAME		ADDRESS		

(CONTINUED ON REVERSE)

**VEHICLE ACCIDENT REPORT - SIDE 2.****FORM STD. 270 (Caltrans)**

<div>STATE OF CALIFORNIA <b>VEHICLE ACCIDENT REPORT</b> STD. 270 (REV. 03/2000) (REVERSE)</div> <div style="text-align: center;"><b>* CONFIDENTIAL INFORMATION *</b> <small>DO NOT RELEASE TO OTHER PARTIES WITHOUT CONSENT OF THE OFFICE OF RISK AND INSURANCE MANAGEMENT</small></div>																										
ACCIDENT DETAILS - DESCRIPTION	<div>STATE FULLY HOW ACCIDENT OCCURRED (Give Details, attached additional sheets if necessary)</div> <div style="text-align: center; font-size: 48px; margin-top: 50px;">Sample</div>																									
ACCIDENT DETAILS - DIAGRAM	<div style="display: flex; justify-content: space-between; align-items: flex-start;"><div style="flex: 1;"></div><div style="flex: 1; font-size: 0.8em;"><p>Number State vehicle as 1, other vehicle(s) as 2, 3, etc.</p><p>Show pedestrian by ○</p><p>Show direction of travel as follows: Before accident _____ After accident _____</p><p>Give names or numbers of street or roads</p></div></div>																									
ADDITIONAL VEHICLE/PASSENGER(S)	<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td colspan="2">DRIVER'S NAME</td><td>AGE/DOB</td><td>VEHICLE LICENSE NO.</td><td>VEHICLE YEAR, MAKE, MODEL</td></tr><tr><td>DRIVER'S LICENSE NO.</td><td>HOME TELEPHONE</td><td>WORK TELEPHONE</td><td colspan="2">REGISTERED OWNER</td></tr><tr><td colspan="3">DRIVER'S ADDRESS (Street, City, State, Zip Code)</td><td>ADDRESS (Street, City, State, Zip Code)</td><td>HOME TELEPHONE</td></tr><tr><td colspan="3"></td><td></td><td>WORK TELEPHONE</td></tr><tr><td colspan="4">BRIEFLY DESCRIBE DAMAGES TO OTHER VEHICLE OR PROPERTY</td><td>NAME AND ADDRESS OF OTHER PARTY'S INSURANCE COMPANY</td></tr></table>	DRIVER'S NAME		AGE/DOB	VEHICLE LICENSE NO.	VEHICLE YEAR, MAKE, MODEL	DRIVER'S LICENSE NO.	HOME TELEPHONE	WORK TELEPHONE	REGISTERED OWNER		DRIVER'S ADDRESS (Street, City, State, Zip Code)			ADDRESS (Street, City, State, Zip Code)	HOME TELEPHONE					WORK TELEPHONE	BRIEFLY DESCRIBE DAMAGES TO OTHER VEHICLE OR PROPERTY				NAME AND ADDRESS OF OTHER PARTY'S INSURANCE COMPANY
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NAME	TELEPHONE	ADDRESS																								
NAME	TELEPHONE	ADDRESS																								
<small>The answers in this report contain a true and full account of the accident, and the vehicle was being operated on official business of the state at the time of the accident. Attach extra pages as necessary.</small>																										
Employee Signature and Date		Supervisor Signature and Date		Supervisor Name and Title																						
				Supervisor Telephone Number																						



**DATA INPUT FOR MOTOR VEHICLE ACCIDENT-SIDE 1.****FORM PM-S-0270**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**DATA INPUT FOR MOTOR VEHICLE ACCIDENT**  
PM-S-0270 (REV. 5/95)

**CONFIDENTIAL**

*This document contains personal information and  
pursuant to Civil Code 1798.21 it shall be kept  
confidential in order to protect against unauthorized*

**ACCIDENT INFORMATION**

*(This Form to be completed by First Line Supervisor)*

DATE OF ACCIDENT	TIME (24 Hour)	CALTRANS EMPLOYEE INJURED? <input type="checkbox"/> Yes <input type="checkbox"/> No	ACCIDENT NUMBER <b>M -</b>
		OTHER CALTRANS VEHICLE(S) INVOLVED? <input type="checkbox"/> Yes <input type="checkbox"/> No	

ACCIDENT DESCRIPTION (Briefly describe Accident - Provide Details not included below)

WAS A POLICE REPORT FILED? <input type="checkbox"/> Yes <input type="checkbox"/> No	IF YES, ENTER FROM TOP OF POLICE REPORT**	N.C.I.C. #	OFFICER'S BADGE #
---	---	------------	-------------------

**EMPLOYEE INFORMATION**

LAST	FIRST	MI	SEX	DATE OF HIRE
SOCIAL SECURITY NUMBER		BIRTHDATE	DRIVER LICENSE NUMBER	
CLASS CODE		MTCE ACTIVITY NUMBER	DRUG TEST (Sensitive Positions Only) <input type="checkbox"/> Yes <input type="checkbox"/> No	
DISTRICT NUMBER		UNIT/COST CENTER*	ITEM NUMBER	C-NUMBER
			LICENSE NUMBER	ESTIMATED REPAIR COST

**DETAILED INFORMATION**

*(Circle one appropriate for each Category)*

<b>A. WEATHER</b> 01 CLEAR 02 CLOUDY 03 FOG 04 RAIN 05 SNOW 06 WIND	<b>I. PROTECTIVE BELT IN USE</b> 01 LAP BELT 02 SHOULDER HARNESS 03 BOTH LAP BELT & SHOULDER HARNESS 04 NONE USED	<b>M. DRIVERS CONDITION</b> <b>ST. OTH.</b> 01 01 NORMAL 02 02 DRUG/ALCOHOL IMPAIRED 03 03 ILL 04 04 SLEEPY OR FATIGUED 05 05 INATTENTIVE 06 06 OTHERWISE IMPAIRED	<b>P. MOTOR VEHICLE INVOLVED WITH</b> 01 NON COLLISION 02 PEDESTRIAN 03 OTHER MOTOR VEHICLE 04 MOTOR VEHICLE ON OTHER ROADWAY 05 TRAIN 06 BICYCLE 07 ANIMAL 08 FIXED OBJECT 09 RUNAWAY VEHICLE
<b>B. VISIBILITY</b> 01 OVER 1/2 MILE 02 LESS THAN 1/2 MILE 03 LESS THAN 100 YARDS	<b>J. GENERAL LOCATION</b> 01 CITY STREET 02 CONVENTIONAL HIGHWAY 03 CONSTRUCTION 04 FREEWAY 05 FREEWAY RAMP OR CONNECTOR 06 LANING SHOULDER CLOSURE 07 PRIVATE PROPERTY 08 RURAL ROAD 09 STAKE YARD OR ROPERTY 10 TURN OFF OR UEB 11 MAINTENANCE WORK ZONE	<b>N. MOVEMENT PROCEEDING COLLISION</b> 01 STOPPED 02 PROCEEDING STRAIGHT 03 RAN OFF ROAD 04 MAKING RIGHT TURN 05 MAKING LEFT TURN 06 BACKING 07 SLOWLY STOPPING 08 PASSING OTHER VEHICLE 09 CHANGING LANE 10 LANE 11 PARKING MANUEVER 12 ENTERING TRAFFIC 13 EVASIVE MANUEVER 14 CROSSING INTO OPPOSING LANE 15 PARKED 16 MERGING 17 TRAVELING WRONG WAY 18 LOST CONTROL	<b>Q. PEDESTRIAN INVOLVEMENT</b> 01 NO PEDESTRIAN INVOLVED 02 CROSSING- IN CROSSWALK 03 CROSSING- NOT IN CROSSWALK 04 WALKING ALONG ROADWAY
<b>C. ROAD CONDITION</b> 01 DRY 02 WET 03 SNOW/ICE 04 SLIPPERY (MUDDY, OILY, ETC) 05 NOT A FACTOR	<b>K. SPECIFIC LOCATION</b> 01 AT INTERSECTION 02 MEDIAN 03 OFF STREET OR HWY IN R/W 04 ON BRIDGE 05 PARKING LOT 06 SHOULDER 07 TRAVELLED WAY	<b>O. TYPE OF COLLISION</b> 01 HEAD ON 02 SIDESWIPE 03 HIT IN REAR 04 BROADSIDE 05 HIT OBJECT 06 OVERTURNED 07 VEHICLE/PEDESTRIAN 08 HIT REAR OF OTHER	<b>R. ACCIDENT CLASS</b> (SEE REVERSE FOR DETAILS) 01 I (a) 02 I (b) 03 II (a) 04 II (b) 05 II (c) 06 III
<b>D. PREVENTABILITY</b> 01 BY DRIVER 02 NON PREVENTABLE 03 BY OTHER CALTRANS EMPLOYEE 04 BY CALTRANS MANAGEMENT 05 BY PRIVATE PARTY	<b>L. BASIC CAUSE</b> <b>ST. OTH.</b> 01 01 EXCESSIVE SPEED 02 02 FOLLOWING TOO CLOSE 03 03 IN WRONG LANE 04 04 AVOIDING AUTO OR OBJECT 05 05 IMPROPERLY PARKED 06 06 IMPROPER BACKING 07 07 DISREGARD OF SIGNS, SIGNALS ETC. 08 08 FAILURE TO OBSERVE CONDITIONS 09 09 POOR JUDGEMENT 10 10 IMPROPER OPERATION OF VEHICLE 11 11 UNKNOWN 12 12 BLOCKED VISION 13 13 DEFECTIVE EQUIPMENT 14 14 LOST LOAD	<b>S. OCCUPATION</b> 01 ADM - ALL OFFICE WORK 02 LAB - LAB TESTING, FIELD AND LAB 03 SHIP - MECHANICS, WELDERS, ETC. 04 CON - FIELD CONSTRUCTION 05 SUR - FIELD SURVEYS 06 FTR - FIELD TRAFFIC 07 TOL - TOLL SERVICES 08 FMT - FIELD MAINTENANCE 09 SPP - SPECIAL PROGRAM PEOPLE 10 CEM - CONTRACTORS EMPLOYEE †	
<b>E. VEHICLES</b> 01 SOLO 02 TWO OR MORE MOVING VEHICLES			
<b>F. TYPE OF VEHICLE</b> 01 STATE 02 PRIVATE 03 RENTAL			
<b>G. VEHICLE FUNCTION</b> 01 EQUIPMENT 02 TRANSPORT PERSONNEL 03 TRANSPORT EQUIPMENT 04 TRANSPORT MATERIAL 05 SNOW REMOVAL 06 SHADOW 07 BARRIER 08 ADVANCE WARNING			
<b>H. CRASH CUSHION</b> 01 HIT 02 NOT HIT 03 NOT APPLICABLE			
<b>IF 03 IS CIRCLED ENTER EMPLOYEE'S SOCIAL SECURITY NUMBER</b> _____			
<b>ENTER THE UNIT NUMBER THE EMPLOYEE WAS CHARGED TO AT THE TIME OF THE ACCIDENT</b> _____			
<b>**THIS INFORMATION IS INCLUDED TO ENABLE COMPARISON OF SUPERVISOR'S REVIEW TO THAT OF LAW ENFORCEMENT OFFICER</b>			
<b>† INCLUDED FOR TRACKING PURPOSES ONLY</b>			
This Form must be certified correct by the Safety Officer before Data Input <input type="checkbox"/> Certified correct O.K. for Data Entry			
SAFETY OFFICER'S SIGNATURE			
ENTERED BY (Initial) _____ DATE _____			

JULY 1996

18-25

**DATA INPUT FOR MOTOR VEHICLE ACCIDENT-SIDE 2.****FORM PM-S-0270****DATA INPUT FOR MOTOR VEHICLE ACCIDENT**

PM-S-0270 (REV. 5/95)

**REPORTING MOTOR VEHICLE ACCIDENTS**

**SELECTION OF BASIC CAUSE:** The supervisor, after discussing the accident with the driver or worker and making such investigation as is necessary, shall select and indicate a BASIC CAUSE for the accident for either of both (1) the State driver or worker (2) the other car, other worker, pedestrian, or object.

**ACCIDENT CLASSIFICATION:** The following definitions from Section 16.02 of the Equipment Manual will be used to determine the appropriate classification of an accident. All class III accidents require that the full details of the accident investigation be included on the reverse of this form. Whether or not class I or class II accidents shall be included on the reverse of this form shall be subject to direction from each individual Division or District. Consult with the District or Headquarters Safety Officer for direction in your area.

**CLASS I (a)** - State vehicle indirectly involved - when a state vehicle is in the proximity of an accident and it may be alleged that the accident was due, in whole or in part, to the operation or position of the state-owned vehicle or equipment.

**CLASS I (b)** - Work damage to others - when an adverse vehicle or property is damaged by being struck by or material falling or thrown from a state-owned vehicle or equipment;

**CLASS II (a)** - Work damage - Unavoidable damage to state vehicle or equipment that occurs during proper use but not in the case of a traffic accident;

**CLASS II (b)** - Vandalism/Theft - Damages as a result of vandalism or theft must be reported on Std. Form 270. In both cases, local law enforcement officials, as well as claims officer, must be notified immediately;

**CLASS II (c)** - Operational damage to others - damage to another vehicle or property because of normal and operational use of state equipment or vehicles. This category does not include traffic accidents;

**CLASS III** - Any accident which does not fall in Class I or II is a Class III accident. Every accident in which a state owned motor vehicle is involved and results in a reportable personal injury or in a death and any accident that is caused by driver error.

**PREVENTABILITY**

Except for accidents involving mechanical failure, the decision as to whether the accident is preventable is to be based solely on whether or not the driver exercised prudent and careful judgement in his/her attempt to avoid the accident regardless of any legal rights (such as right-of-way at intersection) to which he/she may have been entitled under the vehicle code.

This rule imposes on each driver the positive duty of doing all that can be done within reason under the particular circumstances to avoid accidents. He/she is expected to carefully anticipate emergency situations, and to make every possible effort to avoid accidents. If the driver fails to avail himself/herself of the "last clear chance" to avoid an accident, the accident is preventable regardless of the question of primary responsibility for the accident. The test to be applied is one of preventability, taking all facts and circumstances under consideration.

In addition to examining the actions of the driver regarding his/her taking the "last clear chance" to avoid this accident, please examine the facts of the accident to determine if the accident could have been prevented by 1) another Caltrans employee, 2) Caltrans management (yourself included) or 3) another party. If so circle the appropriate code. If another Caltrans employee could have prevented the accident, enter that employee's Social Security Number in the space provided and provide comments in the accident description as to what that employee could have done to prevent the accident.

**FOR FIRST LINE SUPERVISOR****ACCIDENT PREVENTION PLAN**

1) I HAVE TAKEN THE FOLLOWING ACTION(S) TO PREVENT RECURRENCE OF THIS TYPE OF ACCIDENT.

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2) I RECOMMEND THE FOLLOWING ADDED ACTION(S) TO PREVENT THIS TYPE OF ACCIDENT.

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1ST LINE SUPERVISOR (Signature)

DATE

**FOR SECOND LINE SUPERVISOR**

☐ I agree ☐ disagree with 1st line supervisor actions and/or recommendations

COMMENTS:

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2ND LINE SUPERVISOR (Signature)

DATE

**FOR SAFETY OFFICER**

☐ I agree ☐ disagree with actions and/or recommendations ☐ This accident was preventable based on the facts as presented or as determined by Safety Office review or investigation.

COMMENTS:

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SAFETY OFFICER (Signature)

DATE

JULY 1996

18-26

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MOTOR VEHICLE ACCIDENTS

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 19

## SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS, OR FATALITY

### THE DEPARTMENTAL REPORTING PROTOCOL

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19.0-2	POLICY STATEMENT
19.0-3	REPORTING REQUIREMENTS
19.0-3.1	Cal-OSHA REPORTING REQUIREMENTS AND DEFINITIONS
19.0-3.2	NOTICE TO EMPLOYEE CRIME VICTIMS

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19.1-2	<u>ACTIONS FOR FATALITIES</u>
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19.1-4	REDUNDANT REPORTING
19.1-5	RELEASE OF PERSONAL INFORMATION
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2. SECOND-LINE SUPERVISOR
3. DISTRICT SAFETY AND HEALTH OFFICER
4. DEPARTMENTAL SAFETY AND HEALTH OFFICER
5. DISTRICT PUBLIC AFFAIRS OFFICER
6. DEPARTMENTAL PUBLIC AFFAIRS OFFICER
7. DISTRICT LABOR RELATIONS OFFICER
8. DEPARTMENTAL LABOR RELATIONS OFFICER

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# CHAPTER 19

## SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS, OR FATALITY

### THE DEPARTMENTAL REPORTING PROTOCOL

#### 19.0-0 INTRODUCTION

Whenever an employee has a serious occupational injury, illness, or is fatally injured in connection with any employment activity, including incidents of workplace violence, or is a victim of a crime that occurs at a place of employment, Cal/OSHA, the State Compensation Insurance Fund (SCIF), and the Labor Code require special reporting procedures.

#### 19.0-1 PURPOSE

This chapter explains the Cal/OSHA, SCIF, and Labor Code requirements, and describes the Department's protocol for reporting timely and accurate information to the affected employee's chain-of-command, other agencies, and/or jurisdictions.

Because of the variety of reporting requirements, personnel activities associated with gathering information, medical and survivor benefits issues, and investigative processes, this chapter is divided into four (4) parts as follows:

**Part 1.** Covers what-to-do by the **first-person** after they become aware that an injury, illness, or fatality has occurred.

This section focuses on specific actions the **first-person** must do immediately following an accident, what information is needed, and how to report.

**Part 2.** Covers what-to-do by various management personnel, as a matter of routine immediately following an injury, illness, or fatality.

This section focuses on chain-of-command notices and routine activities performed by supervisors and personnel offices, including writing letter of condolence, workers compensation benefits and payments, release of names, family notices, and lowering flags to half-staff.

**Part 3.** Explains other activities available to management.

This section discusses time off to attend funeral services, family visitations, and employee assistance (EAP).

**Part 4.** Describes the investigative processes.

This section explains the three (3) investigative processes available to management. They include an internal process known as DART, the California Highway Patrol process known as MAIT, and the Cal/OSHA process which focuses on violations of safety and health regulations.

## **19.0-2 POLICY STATEMENT**

Managers, supervisors, and employees shall do everything reasonably possible to follow the Department's protocol for reporting timely and accurate information to the affected employee's chain-of-command, other agencies, and/or jurisdictions.

## **19.0-3 REPORTING REQUIREMENTS**

The California Code of Regulations and the Labor Code require specific reporting procedures covering work-related injury, illness, and fatality in connection with any employment activity, including incidents of workplace violence, and when an employee is a victim of a crime that occurs at a place of employment. The following two (2) subsections describe each reporting requirement:

### **19.0-3.1 Cal/OSHA REPORTING REQUIREMENTS AND DEFINITIONS**

Cal/OSHA requires that every employer shall report any serious injury, illness, or fatality, by telephone, **within 8 hours** to a local or regional office:

Cal/OSHA defines serious injury or illness as:

***“ . . . any injury or illness occurring in a place of employment or in connection with any employment which requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation, or in which an employee suffers a loss of any member of the body or suffers a serious degree of permanent disfigurement, but does not include any injury, illness, or death caused by the commission of a Penal Code violation, except the violation of Section 385 of the Penal Code, or an accident on a public street or highway.”*** [Title 8 CCR Section 330(h)]

Cal/OSHA also requires reporting the following:

***“ . . . any serious injury, or illness, or death of an employee occurring in a place of employment or in connection with any employment.”***  
[Title 8 CCR Section 342(a)]

See NOTE on next page.

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**NOTE:** Inpatient hospitalization is only part of the qualifying definition. The severity of the injury or illness is also important in deciding whether or not it is necessary to notify Cal/OSHA.

As a matter of policy, the local or regional office of Cal/OSHA shall be notified as soon as possible but, **no longer than 8 hours** after a qualifying serious injury, illness, or death occurs.

The District or Headquarters Safety and Health Officer or staff shall make the required Cal/OSHA notification.

### **19.0-3.2 NOTICE TO EMPLOYEE CRIME VICTIMS**

- **Eligibility for workers' compensation for employee(s) who is(are) victim(s) of a crime that occurred at place of employment**

Section 3553 of the Labor Code requires management to, "... give any employee who is a victim of a crime that occurred at the employee's place of employment written notice that (he or she) is eligible for workers' compensation for injuries, including psychiatric injuries, that may have resulted from the place of employment crime."

The notice must be given either personally or by first-class mail, within one working day of the place of employment crime, or within one working day of the date the employer reasonably should have known of the crime.

Supervisors, with the assistance of the District Safety and Health Offices, and the Workers' Compensation Case Managers shall ensure that affected employee(s) are notified about this policy.

As a general rule, notification about eligibility for workers' compensation for injuries, including psychiatric injuries, should be given to: 1) injured employee(s), 2) an employee(s) directly involved, but uninjured, 3) and/or employee(s) at the worksite.

#### **NOTE:**

See Chapter 6 - WORKPLACE VIOLENCE for details about Departmental policies, procedures, and strategies for maintaining a zero tolerance for violence in the workplace.

See Chapter 9 - FIRST AID AND EMERGENCY MEDICAL TREATMENT, Section 9.07 NOTICE TO EMPLOYEE CRIME VICTIMS, for specific language.



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**PART 1. INITIAL NOTIFICATION AND REPORTING****19.1-1 SPECIFIC FIRST-PERSON REPORTING**

Whenever a serious occupational injury, illness, or fatality occurs, **the first person** (any employee) who becomes aware of an accident shall:

- Obtain sufficient preliminary information about the accident so all levels of management can be as well informed as possible during the early stages of gathering the facts.

**The preliminary information should include, but not limited to:**

- type of accident (motor vehicle/pedestrian),
  - type of work (maintenance work zone/construction work zone),
  - severity of injury(ies) (fatal/personal injury/chemical exposure),
  - location (city/county/highway/post mile),
  - date, time of day,
  - where they were taken for medical attention,
  - name of injured employee(s),
  - work classification of injured employee(s),
  - description of other party (company name/individual name), and/or
  - type of vehicle (truck/truck-trailer/auto).
- The **first-person** shall notify (by telephone or personal visit, etc.) his/her supervisor with as much of the preliminary information, as described above, as soon as possible. If the supervisor is unavailable, the **first person** shall notify another appropriate person; e.g., leadworker, co-worker, another supervisor. Follow the area's chain-of-command.

During the early stages of information gathering, the following persons shall be notified by telephone or facsimile:

- The District Division Chief for the functional area;
- The District Director;
- The Program Manager or Service Center Director for the functional area;
- The Director's Office; and,
- The Safety and Health Officer (District or Headquarters).

(The titles of individuals and/or the names of offices listed here are provided as a general guide and are not displayed in order of strict priority. What is important is that the person receiving the preliminary information shall, at a minimum, notify or be responsible to ensure the notification is made.)

---

**19.1-2 ACTIONS FOR FATALITIES**

The following are mandatory actions whenever there is a fatality. The items are not listed in order of strict priority.

See Section 19.2-1 - **CHAIN-OF-COMMAND REQUIREMENTS**, for more information.

- **Notify Director's Office and other managers**

Responsibility of affected employee's chain-of-command

- **Initial family notification**

Responsibility of affected employee's chain-of-command

NOTE:

Release of the deceased employee's name should be done only after confirmation of the Coroner's Office or other appropriate authority.

Premature release of an employee's name based on informal co-worker or unauthorized eyewitness identification shall be avoided.

- **Statewide notification**

Responsibility of Director's Office

- **Notice to lower flags to half-staff\* from the day of the employee's death through the day of the funeral**

Responsibility of Director's Office and Facilities Management

\* NOTE: Building managers shall ensure that flags are lowered and raised when directed. To ensure all employees are notified in a timely manner, particularly employees who work in remote areas such as maintenance stations, construction field offices, and satellite offices, the notice to lower flags to half-staff and return to full-staff, should be made by telephone or facsimile machine.

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- **Personal visitation to family member or designated individual**

Responsibility of affected employee's chain-of-command

- **Cal/OSHA notification**

Responsibility of Office of Safety and Health

- **Notify Department of General Services, Office of Insurance and Risk Management notification**

Responsibility of Office of Safety and Health

- **Notify State Compensation Insurance Fund (SCIF)**

Responsibility of Personnel Transactions and the Office of Safety and Health - Workers' Compensation Case Management Unit

- **Funeral benefit preparation**

Responsibility of Personnel Transactions and the Office of Safety and Health - Workers' Compensation Case Management Unit:

SCIF pays actual cost of funeral expenses up to \$5,000. It should be expected that most family members do not know about this benefit. In order to ease the burden and assist family members, the Personnel Office representative should do the following:

1. Notify SCIF of fatality.
2. Send SCIF adjustor "draft/dummy" copy of Form SCIF 3067 (SCIF adjustor will open claim file.)
3. Provide (telephone/FAX) with funeral arrangements:
  - name, phone of family or friend making arrangements;
  - name, phone of funeral provider; and
  - SCIF adjustor will coordinate with funeral director.
4. SCIF adjustor will contact family/designee:
  - will discuss details with family/designee, and
  - will arrange for direct payment to funeral provider.
5. Send SCIF completed Form SCIF 3067.

---

- **Letter of condolence**

Responsibility of Director's Office

- **The Personnel Officer shall assign a key individual to oversee and ensure that a communications link is kept open with the family and periodic contact is maintained until State death benefits and other survivor benefits are determined, or until such time that further contact is not appropriate**

Responsibility of Personnel Transactions with assistance from the affected employee's chain-of-command

- **Accommodate employee requests for time off to attend funeral services**

Responsibility of affected employee's supervisor and chain-of-command (See Part 3, Section 19.3-1.)

- **Consider EAP assistance and referral services for employees**

Responsibility of affected employee's supervisor or other managers in the chain-of-command, with assistance from the Office of Safety and Health

SPECIAL NOTE:

- **Notify California Transportation Foundation**

Responsibility of Chief, Office of Personnel Operations

By agreement with the Director's Office and the California Transportation Foundation, the Chief, Office of Personnel Operations will notify the Foundation whenever there is a work-related serious injury, illness, fatality, or an employee and/or family assistance situation arises.

**19.1-3 REPORTING NON-CALTRANS EMPLOYEE**

This section applies ONLY to NON-Caltrans employees working on a Caltrans project.

If a non-Caltrans employee is injured, becomes ill, or is killed, the Resident Engineer, Area Superintendent, or other appropriate Caltrans manager/supervisor shall obtain the name of the company, contractor, consultant, and other pertinent information, and shall notify the appropriate management personnel.

A non-Caltrans employee is defined as: a contractor's employee, a consultant retained by the Department, Adopt-A-Highway groups, Special Programs People (litter pickup/probationers), or a visitor to a Caltrans work area.

For the purpose of this protocol, the notification requirements for a non-Caltrans employee is limited:

- Managers and supervisors should rely on emergency responder and/or emergency medical provider notification procedures, such as those routinely handled by police and hospital authorities for family members and other notifications.
- Managers and supervisors do have an obligation to cooperate and share information with contractor and/or consultant personnel, and may establish a liaison between the Department's functional area manager and the affected contractor and/or consultant.

**19.1-4 REDUNDANT REPORTING**

The Director of Transportation has charged the Chief, Office of Safety and Health with the responsibility to conduct redundant reporting whenever a serious injury, illness, or fatality occurs. The purpose of the redundant reporting is to ensure that the affected employee's chain-of-command has notified other departments, agencies, and jurisdictions about each qualifying event.

The redundant reporting is essentially a personal inquiry by the Chief of Office of Safety and Health to affirm all reporting and notification requirements have been completed. Managers and supervisors are requested to cooperate with the Chief, Office of Safety and Health when inquiries are made about the reporting and notification requirements.

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**19.1-5 RELEASE OF PERSONAL INFORMATION**

Release of the Caltrans employee's name, notification to the spouse, family member, or designated individual, **shall not** be made without the **knowledge and approval** of the Personnel Office.

Also the name of the injured, ill, or fatally injured employee **shall not** be released to the news media, or to others outside of the Department, until the spouse, family member, or designated individual has been notified.

**19.1-6 NOTIFYING FAMILY MEMBERS**

The notification of family members shall be handled by personal visit, not by telephone. The Director's staff, Program Manager, Service Center Director, Office Chief, Maintenance Manager, or similar positions of authority have been identified as the appropriate level of management to notify the affected employee's family member or designated individual.

Whenever it is impractical for one of these individuals to make the initial notification, he/she shall designate a representative to act in their behalf.

The affected employee's personnel files should be reviewed to confirm family name/individuals are listed for notification and to ensure there are no conflicts between the names listed and other persons who may have been pre-selected by the employee.

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**19.1-7 COMMUNICATIONS SECTION - HEADQUARTERS OR DISTRICT**

The Communications Section operator (Headquarters or District) shall notify, by telephone or personal visit, the Offices (Headquarters or District) of Safety and Health of all teletype and/or facsimile messages regarding any serious occupational injury, illness, or fatal accident as soon as possible. Copies of all messages shall be accumulated and delivered to the Offices (Headquarters or District) of Safety and Health as soon as possible after receipt.

The Communications Section operator shall also cooperate and send, as appropriate, all teletype and/or facsimile messages regarding any serious occupational injury, illness, or fatal accident as soon as possible to:

- The District Division Chief for the functional area;
- The District Director;
- The Program Manager for the functional area;
- The Service Center Director;
- The Director's Office;
- The Departmental Personnel Officer; and

Communications Operators shall specify, in the cases of fatalities, whether they are:

1. Repeating a formal identification established by a Coroner's Office, other recognized authority; or
2. Repeating informal information from co-worker or eyewitness statements.

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## **PART 2. ROUTINE NOTIFICATION AND REPORTING**

### **19.2-1 CHAIN-OF-COMMAND REQUIREMENTS**

The following represents the Department's protocol for reporting serious occupational injury, illness, or fatality in the chain-of-command to Departmental personnel, other agencies or jurisdictions.

The titles of individuals and/or the names of offices listed below are provided as a general guide and are not displayed in order of strict priority.

Individuals in the identified positions shall comply with the reporting requirements listed after each position/office name.

#### **1. FIRST-LINE SUPERVISOR**

The first-line supervisor shall notify:

- a. Their supervisor of the injury, illness, or death.
- b. Their Office Chief, Area Superintendent, Branch Chief, Shop Superintendent (within his/her chain-of-command).
- c. His/her supervisor of the name of the person designated to be notified as shown on the employee's emergency contact notice.
- d. Other line managers deemed appropriate; and,
  1. Review employee's emergency contact information.
  2. Review the employee's records to compile data on leave balances and other compensable items. (Coordinated with Personnel Transactions.)

#### **2. SECOND-LINE SUPERVISOR**

The second-line supervisor shall notify:

- a. The District Division Chief for the functional area.
- b. The District Director.
- c. The Program Manager for the functional area.
- d. The Personnel Office.
- e. The employee's family, in coordination with the Personnel Officer.
- f. The affected employee's family or designated individual.
- g. The District or Headquarters Safety and Health Officer.
- h. The District or Headquarters Labor Relations Officer.
- i. The District or Headquarters Public Affairs Officer.



**3. DISTRICT SAFETY AND HEALTH OFFICER**

The District Safety and Health Officer shall notify:

- a. The Headquarters Office of Safety and Health.
- b. The Department of General Services, Office of Risk and Insurance Management.
- c. The State Compensation Insurance Fund (SCIF).
- d. The Department of Industrial Relations, Division of Occupational Safety and Health (DOSH), Cal-OSHA.
- e. Confirm that Personnel has contacted SCIF and initiate SCIF claim process, funeral benefits, and funeral provider payment.

**4. DEPARTMENTAL SAFETY AND HEALTH OFFICER**

The Departmental (Headquarters) Safety and Health Officer will make the following notifications for Sacramento area Program Managers, and shall comply with Section 19.1-3 Redundant Reporting:

- a. The Department of General Services, Office of Risk and Insurance Management.
- b. Division of Occupation Safety and Health (DOSH), Cal-OSHA.
- c. Make initial determination of the need for a DART, and/or coordinate DART with District/Headquarters functional managers.

**5. DISTRICT PUBLIC AFFAIRS OFFICER**

The District Public Affairs Officer will:

- a. Notify the Headquarters Public Affairs Officer.
- b. Coordinate all media and related information and act in cooperation with the Headquarters Public Affairs Office.

**6. DEPARTMENTAL PUBLIC AFFAIRS OFFICER**

The Departmental Public Affairs Officer will do the following:

- a. In cooperation with the Personnel Operations prepare background information on the victim or affected employee and the accident or qualifying event for release to family members and/or the media when it is determined to be the appropriate time.
- b. Coordinate activities, as appropriate, with the District Public Affairs Officer.

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**7. DEPARTMENTAL LABOR RELATIONS OFFICER**

The Departmental Labor Relations Officer will do the following for all Caltrans employees:

- a. Notify the appropriate employee organization when a serious occupational injury or illness occurs, or when an employee is fatally injured in connection with any employment activity.
- b. Assist the Personnel Officer in determining the employee's bargaining unit management designation.

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**19.2-2 PERSONNEL OFFICE AND PERSONNEL TRANSACTIONS**

The Personnel Office and Personnel Transactions will do the following:

- a. Review the employee's official personnel folder for notification of family members, designated physician, or other appropriate medical services, and list of contacts for beneficiaries for survivor and other benefits.
- b. Follow existing guidelines established by SCIF, Social Security, and PERS for the purpose of determining appropriate medical and/or survivor benefits.
- c. Contact SCIF as soon as possible following a fatality. Initiate SCIF claim process, funeral benefits, and funeral provider payment.
- d. Contact the Department of Personnel Administration (DPA) Benefits Division, Social Security Office, and Public Employees Retirement System (PERS).
- e. Contact the Department of General Services, Office of Risk and Insurance Management to arrange for life insurance payment.
- f. Have employee's work records reviewed to compile data on leave balances and other compensable items as appropriate.
- g. Identify the employee's bargaining unit management designation (B.U.M.D.) then contact DPA Benefits Division for non-represented employees and the District Labor Relations Officer for represented employees to determine available survivor benefits. Include those benefits as information for the employee's family (may confer with Headquarters Labor Relations).
- h. Prepare a letter of condolence from the Director to the family of the injured, ill, or fatally injured employee.
- i. Notify the California Transportation Foundation whenever there is a work-related fatality or an employee and/or family assistance situation arises.

NOTE:

The Personnel Office shall keep management informed of all plans and any problems which may arise.

The Personnel Office shall assist supervisors, managers, and others to ensure that family members are provided with the most current information regarding benefits.

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**PART 3. OTHER ROUTINE PROCEDURES AND ACTIVITIES****19.3-1 TIME OFF TO ATTEND FUNERALS**

District Directors, Program Managers, or Service Center Directors may:

- a. Accommodate employee requests for time off for the purpose of attending funeral services, provided the integrity of the workplace is maintained.
- b. Authorize other activities, upon concurrence of the Director's Office.

**19.3-2 FAMILY VISITATION**

The purpose of the visit is to establish a communications link with the employee's family so Departmental managers may provide assistance, information, and support, as may be deemed appropriate.

District Directors and Program Managers are encouraged to visit the family member(s) or designated individual of an injured, ill, or fatally injured employee and express the sympathy of the Department. Whenever it is impractical for them to do so, they shall designate an individual to act in their behalf.

The employee's supervisor or other appropriate persons are encouraged to accompany the District Director or Program Manager on their visit. Whenever it is impractical for them to do so they should designate an individual to act in their behalf.

Managers and supervisors should assess and/or consider alternative individuals if, for any reason, the affected employee or family does not have a harmonious relationship with any of the selected management representatives.

The individuals who participate in the visit should contact the Personnel Office to obtain the most current information about applicable medical benefits, workers' compensation, and/or survivor benefits before the visit.

**NOTE:**

Some judgement should be used when selecting a member of management to conduct a family visit. Selected individuals who may have a history of differing opinions than those of the injured, ill, or deceased employee should not, or need not, be asked to participate in a family visitation.

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It is Department policy to provide the family member(s), or designated individual all reasonable assistance. Personnel Offices and Personnel Transactions shall establish and maintain procedures that include a checklist of contacts to ensure beneficiaries are notified of funds and/or benefits available.

The Personnel Office shall keep in close contact with the Director's Office, District Director, or Program Manager to inform them of all plans and any problems which may arise.

### **19.3-3 EMPLOYEE ASSISTANCE PROGRAM (EAP)**

The Employee Assistance Program (EAP) is an employee benefit to help employees resolve problems which may affect work performance, through counseling and referral for employees and their families.

EAP is for employees who may show signs of struggling with a personal problem, or a work-related problem.

Supervisors should call the EAP whenever they need assistance in resolving an employee problem, and/or advise or guidance when planning a meeting with an employee to discuss performance problems.

An employee can obtain assistance through 1) self-referral or 2) informal referral by his/her supervisor, and 3) formal supervisory referral to the EAP.

EAP counseling is available to those employees affected by traumatic incident. Managers and supervisors are responsible for arranging this service by contacting the District or Headquarters Safety and Health Office.

Supervisors should ensure that employees are given a copy of the "Employee Assistance Program" pamphlet, and have a copy of the Employee Assistance Program, "Supervisor's Handbook."

## **PART 4. INVESTIGATIVE PROCESSES**

There are three (3) types of investigative efforts that may be initiated to examine either an injury, illness, or fatal accident involving a Caltrans employee. The following briefly defines each process:

1.) **Departmental Accident Review Team (DART):**

This is a Caltrans internal process used to conduct a joint/cooperative review of the accident, with the affected program manager's staff, and a critique of specific program-related policies, procedures, and work practices being followed by the employee(s) at the time of the accident.

The DAR[Team] also uses the opportunity, during the accident and policy review, to see if the supervisor is in compliance with Departmental policy as required in the Department's Injury and Illness Prevention Program.

2.) **Multi-disciplinary Accident Investigation Team (MAIT):**

This is a California Highway Patrol (CHP) in-depth accident scene investigative effort initiated whenever a major injury or fatal motor vehicle highway accident occurs involving a Caltrans employee or operation.

3.) **Cal-OSHA:**

This is a Department of Industrial Relations (Cal-OSHA) investigative effort, used occasionally, whenever a serious occupational injury, illness, or fatality occurs involving a Caltrans employee or operation.

### **19.4-1 The DEPARTMENTAL ACCIDENT REVIEW TEAM (DART)**

Following notification that an accident occurred, the Chief, Office of Safety and Health, in discussions with the District Director, Program Manager, or Service Center Director of the affected employee, will determine if a DART should be established.

The initial consideration for establishing a DART is based upon whether or not the accident qualifies for notifying Cal-OSHA.

The criteria for the Cal-OSHA notification is described below in the section titled: Qualifying Definitions for a DART - The Triggering Event, and is based upon the need for hospitalization and severity of the injury to the affected employee.

- **Purpose and Scope of a DART**

A DART is an operational program review and an administrative review process, not an accident investigation, per se, because its primary focus is to review Departmental policies, procedures, and work practices.

Its primary focus is to make an operational review of specific program-related policies, procedures, and work practices being used, at the time of an accident, to see if they were understood, correctly interpreted, and properly followed. This type of review is also done to see if the affected employees had the necessary equipment, were properly trained and qualified, and if they performed their task in accordance with specific program-related work rules and safety policies.

Its secondary focus is administrative, because it is essentially a retrospective look at how well the Department's Injury and Illness Prevention Program (based on Section 3203 of the General Industry Safety Orders, and Section 1509 of the Construction Safety Orders) has been implemented and maintained by the affected employee's supervisor, and his/her chain-of-command (Program Manager).

Combining both operational and administrative review techniques, the DART members want to see documentation which demonstrates that the supervisor is in compliance with specific program-related policies, and the Department's Injury and Illness Prevention Program by confirming that he/she:

1. Has a copy of the Caltrans Safety Manual?
2. Understands what the Department's Injury and Illness Prevention Program is, and his/her role in fulfilling the requirements?
3. Has regularly scheduled meetings with their employees to discuss safety and health issues?
  - Every 10-days for field workers.
  - At least quarterly for office workers.
4. Conducts and documents periodic facility safety inspections or operational reviews of all worksites?
5. Investigates and documents all reported occupational injuries and illnesses?
6. Provides training covering hazards basic to all work and hazards unique to each job assignment?
7. Routinely talks to employees and enforces all safety and health laws, rules, policies, and regulations?
8. Maintains appropriate safety and health-related records?

These items cover the same information and documentation that a Cal-OSHA Compliance Officer would request to see during an inspection or accident investigation.

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- **Qualifying Definitions for a DART , The Triggering Event.**

The Chief, Office of Safety and Health, in discussions with the District Director, Program Manager, or Service Center Director of the affected employee will decide if a DART is needed based upon the circumstances surrounding each event.

As a matter of policy, a DART may be established whenever there is a fatal accident, or when the severity of a serious occupational injury, illness falls within one or both of the following Cal-OSHA definitions:

1. The first definition is based upon inpatient hospitalization and severity of the injury. The definition states in part:

Section 330(h) “ . . . any injury or illness occurring in a place of employment or in connection with any employment which requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation, or in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement, . . . ”

Based on this definition, if an employee becomes injured or ill and is hospitalized in excess of 24 hours for other than medical observation, or in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement, management may establish a DART.

2. The second definition is based upon a “notification” requirement. Cal-OSHA requires that every employer shall report, by telephone within 8 hours, to the local or region office of the Department of Industrial Relations any serious injury, or illness, or death. The definition states in part:

Section 342(a) “ . . . any serious injury, or illness, or death of an employee occurring in a place of employment or in connection with any employment.”

Based on this definition, whenever a serious injury, illness qualifies for notifying Cal-OSHA, or whenever a fatality occurs and Cal-OSHA is notified, management may establish a DART.

See Section 19.0-3.1 Cal-OSHA REPORTING REQUIREMENT AND DEFINITIONS, above for full text of definitions.



- **DAR[Team] Selection and Participation**

The DAR[Team] is made up of a group of employees, consisting of a member of the Headquarters Office of Safety and Health, a representative from the District, or Program Manager, or Service Center Director's staff of the affected employee, and others with select skills.

The Headquarters Safety and Health staff member acts as the leadperson in soliciting individuals to participate as DART members, and also acts as the primary author of a written confidential DART report.

Every effort is made to put together a team of employees who are knowledgeable in applicable policies, procedures, and work practices being followed at the time of the accident, and knowledgeable of other Departmental policies, procedures, and work practices which may appear in various manuals and other/or Departmental sources.

- **The DART Report and Approvals**

In order to ensure uniformity and quality, DART reports include the following:

- Factual information covering the accident and accident scene;
- Damage to vehicles/property and mechanical inspections;
- Personnel history information and training;
- Toxicology (alcohol/drug impairment);
- Judicial disposition;
- Witness statements;
- Analysis of safety policies, procedures, and work practices;
- Conclusions;
- Findings and probable cause;
- Recommendations; and/or
- Peripheral issues as may be warranted.

The DART members jointly participate in doing research, gathering and analyzing facts, and formulating recommendations.

The DART members make recommendations to management which may affect policy, procedural actions, changes in work practices, legislative efforts, training, and other appropriate actions including specific recommendations regarding equipment and/or tool purchases.

The Headquarters Safety and Health staff member acting as the leadperson, and author, writes a report of the groups findings, conclusions and recommendations.

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The report is approved by the Chief, Office of Safety and Health. Copies of the DART report are sent to the members of the Caltrans Safety and Health Advisory Committee for review. See Chapter 1- Management Structure, Section 1.13 DEPARTMENTAL SAFETY AND HEALTH ADVISORY COMMITTEE, for a description of the committee's responsibilities.

(A separate review of the DART report is made by the Legal Program to ensure that the report does not contain any legal conflicts.)

A meeting is scheduled with the Caltrans Safety and Health Advisory Committee, their staff or designee, at which time the DART report is discussed and comments are solicited from each member or participant.

The Caltrans Safety and Health Advisory Committee members limit their comments to approving the recommendations. The Committee may suggest alternate or additional recommendations.

NOTE:

It is expected that the DART report has accurately stated the facts surrounding the accidents, and the analysis, findings, and conclusions support the recommendations, thus making it unnecessary for the Caltrans Safety and Health Advisory Committee members to alter the final report.

Upon concurrence by the Committee members the Chief, Office of Safety and Health sends the recommendations to the appropriate Program Manager for appropriate action and/or implementation.

The Chief, Office of Safety and Health periodically monitors the implementation plan of the Program Manager and provides status reports to the Caltrans Safety and Health Advisory Committee members, as may be required.

**19.4-2 THE CALIFORNIA HIGHWAY PATROL'S  
MULTI-DISCIPLINARY ACCIDENT INVESTIGATION TEAM**

Whenever a major injury or fatal motor vehicle accident occurs involving a Caltrans employee, the California Highway Patrol (CHP) routinely conducts an in-depth accident scene investigation known as a Multi-disciplinary Accident Investigation Team (MAIT).

The area CHP officer arriving at the scene of an accident is responsible to make an initial determination of the need for MAIT assistance. The area CHP Commander makes the final decision and requests the MAIT team to respond to the accident scene.

The MAIT (team) consists of a CHP coordinator, a ranking CHP officer, a Traffic Officer, a Motor Carrier Specialist, and a Caltrans registered civil engineer.

The findings and conclusions of the MAIT are presented to the Department in a written report.

The DART members use the MAIT report as a source of factual information covering specific details of the accident and the accident scene. The MAIT report describes the physical environment of the accident scene.

The date, time of day, location, highway alignment, weather conditions, vehicle damage, and witness statements gleaned from the MAIT report can be useful to supplement the DART report.

**19-4-3 THE Cal-OSHA PROCESS**

When a serious occupational injury, illness, or fatality occurs involving a Caltrans operation at a fixed worksite, like a building, or in a maintenance/construction work zone, the Department of Industrial Relations, Division of Occupational Safety and Health (DOSH), Cal-OSHA, may conduct an accident scene investigation.

A written Cal-OSHA investigative report is not usually presented to the Department. The Cal-OSHA findings and conclusions are normally presented to the Department in the form of written citations based on alleged violations of Cal-OSHA safety and health standards.

The Cal-OSHA citations can be used by the DART as a source of factual information covering specific details of the accident and accident scene. The information can also be used to determine if applicable safety and health policies, procedures, and work practices were followed correctly, or could have been a contributing factor in causing an injury, illness, or fatality. Information gleaned from the Cal-OSHA citations can be useful to supplement the DART report.

**NOTE:**

Because construction work zones are closed to regular vehicular traffic, they are not subject to the same vehicle accident investigation process that the CHP routinely conducts. Therefore, accidents that occur in construction work zones may be investigated by Cal-OSHA and not the CHP. Each agency has different jurisdictions but may conduct independent investigations and prepare separate investigative reports.

REPORTING INJURIES, ILLNESSES, AND FATALITIES

JULY 1996

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**SPECIAL REPORTING OF SERIOUS INJURY, ILLNESS, OR FATALITY**

**THIS SPACE AVAILABLE FOR NOTES:**

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# CHAPTER 20

## EARTHQUAKE PREPAREDNESS

### HOW TO PREPARE FOR EARTHQUAKES

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20.06	AFTER THE EARTHQUAKE
20.07	EMERGENCY ACTION PLANS

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**EARTHQUAKE PREPAREDNESS**

**THIS SPACE AVAILABLE FOR NOTES:**

# CHAPTER 20

## EARTHQUAKE PREPAREDNESS

### HOW TO PREPARE FOR EARTHQUAKES

#### 20.00 INTRODUCTION

This chapter discusses routine actions to prepare for and cope with the destructive forces of an earthquake and employee survival techniques, before, during, and after an earthquake occurs.

This chapter focuses on preparations that can be made prior to the occurrence of an earthquake.

The actual movement caused by an earthquake is seldom a direct cause of injury and death. The movement can cause buildings and other structures to shake and collapse. This chapter focuses on the preparations to reduce injuries that can result from falling debris and objects, splintering window glass, and fire after the earthquake occurs.

#### 20.01 PURPOSE

The purpose of this chapter is to provide employees with information about how they can make the workplace and themselves safer in the event of an earthquake.

This chapter does not deal with actual emergency procedures or instructions.

For specific emergency instructions on how to act and respond in the event of an earthquake, building evacuation, assembly points, and medical emergency responses, refer to the EMERGENCY ACTION PLAN for the building in which you work.

(Each Caltrans facility is required to have a site specific EMERGENCY ACTION PLAN. See Chapter 8, Section 8.06 and 8.07 for details.)

#### 20.02 POLICY STATEMENT

In order to prepare for and cope with an earthquake, every Caltrans owned, rented, or leased facility shall have a written Emergency Action Plan which includes specific instructions on emergency procedures to be followed in the event of an earthquake.



**20.03 WORKPLACE PREPAREDNESS**

Earthquake-related injuries and damages can be minimized simply by becoming aware of potential hazards and taking some basic earthquake preparedness measures.

Earthquakes strike without warning so it is important that specific preparedness measures be taken and then be re-evaluated on a regular basis. The following is a list of items that should be considered when preparing your workplace for a possible earthquake:

- Check first aid supplies.
- Secure all cabinets and shelving to prevent tipping.
- Be aware of overhead hazards (hanging plants, pictures, etc.).
- Remove heavy items from high shelves.
- Keep aisles clear of stacked materials and file cabinets.
- Ensure that computers, printers, and typewriters will not fall.
- Arrange partitions to prevent “domino effect”.
- Arrange work areas to prevent “trapping” of personnel.
- Make sure that exits are clearly marked.

Supervisors should arrange to have the building maintenance personnel make necessary corrections and/or repairs to ensure that the above suggested actions are implemented.

See Chapter 5, PART 1. SAFETY AND HEALTH FOR OFFICE WORKERS, OFFICE SAFETY AND GOOD HOUSEKEEPING, for details about securing furniture and equipment.

**20.04 PERSONAL PREPAREDNESS**

There are many things that individuals can do to protect themselves and others in the event of an earthquake. Following is a list of things to do and items to be familiar with in your work area before an earthquake occurs.

- Building managers shall appoint emergency coordinators for each work location.
- Hold earthquake drills in which all employees participate.
- Know where to go in the event of an earthquake:
  - stand in a doorway,
  - get under a sturdy table or desk, or
  - crouch near the wall and cover your head if caught in a hallway.
- Know where building exits are located.
- Know the location of fire extinguishers in your immediate work area.
- Decide on a safe predesignated meeting place.
- Have a flashlight available if working during the hours of darkness.
- Know the location of the nearest first aid kit.
- Keep emergency supplies available at your worksite, such as non-perishable food.
- Have a battery radio available, if possible. The power may go off and the radio may be the only source of emergency information.
- Familiarize yourself with your facility's Emergency Action Plan.
- Disabled employees are encouraged to develop a "buddy" system with co-workers.

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**20.05 DURING THE EARTHQUAKE**

When an earthquake occurs, the solid earth may pitch and roll like the deck of a ship for several minutes. Earthquakes strike without warning and there will be only seconds to react.

Most casualties result from falling debris and objects, splintering window glass, and fire. The chances of being injured during an earthquake will be reduced if the following procedures are adhered to during the earthquake:

- **DUCK**      When you feel an earthquake, duck under a sturdy table or desk. Stay away from windows, bookcases, file cabinets, tall furniture, heavy mirrors, hanging plants, and other heavy objects that could fall. Watch out for falling plaster or ceiling tiles.
- **COVER**      Stay under cover until the shaking stops. If no table or desk is available, seek cover against an interior wall and protect your head and neck with your arms.
- **HOLD**      Hold onto the table or desk. If it moves, move with it. Hold the position until the ground stops shaking and it is safe to move.

The following are additional tips for specific locations:

- If you are in a high rise building and you are not near a table or desk, move against an interior wall and protect your head with your arms. Do not use elevators. Do not be surprised if the fire alarm sounds or sprinkler systems come on.
- If you are in an elevator, stop at the nearest floor. Exit the elevator and take cover against the interior wall.
- If you are in hallway or corridor, brace yourself against the wall and try to avoid moving. Duck and cover your head with your arms.
- If you are outside, move to a clear area away from trees, buildings, or downed electrical power lines and poles.
- If you are on a sidewalk near buildings, duck into a doorway to protect yourself from falling building materials, window glass, and other building debris.

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- If you are driving a vehicle, pull over to the side of the roadway and stop. Avoid driving under or over highway bridges and underpasses. Avoid driving near electrical power lines. Stay inside your vehicle until the shaking has stopped.
  - If you are in a crowded store or other public place, do not go outside or rush to the exits. Move away from window displays and shelves containing objects that could fall on you.
  - If you are handicapped, such as confined to a wheelchair, stay in the chair. Move to cover. If possible, lock the wheels and protect your head with your arms.
  - If you are home, move away from cabinets, refrigerator, and overhead cupboards. (Consider anchoring appliances to the wall.)
  - If you are at a sporting event; i.e., stadium, theater, stay in your seat and protect your head with your arms. Do not try to leave the facility until the shaking has stopped.
  - Always leave a building in a calm and orderly manner. Do not push or crowd others.

## **20.06 AFTER THE EARTHQUAKE**

After an earthquake, there are likely to be aftershocks and a great deal of confusion. If the proper precautionary steps are followed, personal injuries can be reduced. The following steps should be taken immediately after an earthquake to minimize the chance of injury.

- Remain under cover for a few minutes and prepare for the possibility of aftershocks. Aftershocks often cause more damage to buildings already weakened by the initial shock. Plan where you will seek cover in the event of an after-shock.
- If your building appears to have significant damage, evacuate to a safe pre-determined location, until emergency personnel advises you of the ability to return to your work location.
- Replace telephone receivers back on the telephone cradle. Replacing the receiver will allow telephone circuits to operate properly. Do not use the telephone for personal calls. Use telephones only to report emergencies.

- 
- Check your work area for injured employees and give first aid as may be deemed appropriate. Seek medical treatment as may be required. Do not attempt to move injured persons unless they are in immediate danger.
  - Check for fire hazards. Do not smoke or light matches. Do not turn on lights or other electrical circuits until you are certain that there is no risk of gas leaks.
  - Do not use elevators. Use stairs or fire escape to exit buildings.
  - Turn on portable radio for instructions and news reports. Cooperate fully with emergency personnel.
  - Remain calm and assess your situation carefully. Do not spread rumors, as they often do more harm after the disaster. Reassure and help others.
  - Assist others with special needs.
  - Be aware of other possible dangers which may follow an earthquake such as fire, flood, or landslide.
  - Follow all emergency instructions and if ordered, evacuate according to the Emergency Action Plan for your facility.

## **20.07 EMERGENCY ACTION PLANS**

Supervisors are required to have a copy of, and be familiar with the emergency action plan covering their work area.

See Chapter 8, Section 8.06 EMERGENCY ACTION PLAN REQUIREMENTS FOR ALL WORK LOCATIONS, and Section 8.07 EMERGENCY ACTION PLANS AND EVACUATION REQUIREMENTS SPECIFICALLY COVERING THE AMERICANS WITH DISABILITIES ACT (ADA) for more details.

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# CHAPTER 21

## CUT SLOPE SAFETY

### **A CALTRANS/Cal-OSHA AGREEMENT ON CUT SLOPE SAFETY**

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JULY 1996

CUT SLOPE SAFETY

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**CUT SLOPE SAFETY**

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# CHAPTER 21

## CUT SLOPE SAFETY

### A CALTRANS/Cal-OSHA AGREEMENT ON CUT SLOPE SAFETY

#### 21.00 INTRODUCTION

This chapter explains the agreement between the Department of Transportation (Caltrans) and the Department of Industrial Relations, Division of Safety and Health (Cal-OSHA) regarding work-associated with cut slopes.

This chapter covers only cut slope operations performed by Caltrans Maintenance Program employees. Other work disciplines, such as engineering geologists, should develop separate operating instructions and/or code of safe operating practices. (See Chapter 11 - CODES OF SAFE WORK PRACTICES for writing techniques and details.)

#### 21.01 PURPOSE

The purpose of this chapter is to explain the provisions of the agreement that relate to specific on-site work while engaged in cut slope activities.

Questions regarding broad policy application should be directed to the Maintenance Program Manager or the Headquarters Office of Safety and Health.

#### 21.02 POLICY STATEMENT

Maintenance Program supervisors responsible for cut slope operations shall comply with the requirements of the agreement.

#### 21.03 PLANNING THE WORK

Before work begins a pre-job conference or tailgate safety meeting shall be held to discuss the work schedule, the effects of adverse weather conditions, slide removal, rockfall, slope renovation, and the various hazards that are known to be associated with cut slope operations.

Supervisors shall review and discuss the Code of Safe Operating Procedures listed in the Caltrans Maintenance Manual, or other applicable code covering cut slope safety.

All equipment, appropriate hand tools, and personal protective safety devices and equipment applicable to the work activity, including illumination, shall be available before the work begins.



**21.04 CUT SLOPE INSPECTIONS**

Before work begins, the supervisor shall make a visual inspection of the work zone to determine if the cut slope is stable, or if a rock slide or other unstable condition may exist. If the inspection reveals that the cut slope is stable, the planned work activity may begin.

If the inspection reveals the cut slope or area surrounding the cut slope shows any sign of rock movement or other unstable condition, the work shall not begin, and the supervisor shall designate an employee as "competent" to inspect the work site.

**NOTE:**

Section 1504(a) of the Construction Safety Orders (CSO) defines a "competent person" as:

"One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them."

The supervisor's decision in determining who is "competent" shall include the following factors:

1. The employee's previous work experience in slide and rock removal and slope maintenance.
2. The employee's understanding of the general effects of rain, temperature changes, wind and freeze/thaw cycles on slope stability, and terrain conditions.
3. The employee's familiarity with the geographical area where the work is to be performed.

The individual identified as the "competent person" shall investigate the work zone to determine if it is safe to enter and begin the planned work activity. If it is determined that the slope is unsafe, no work shall be allowed.

The supervisor and/or area superintendent should contact an appropriate engineering unit for a more detailed investigation and evaluation of the cut slope area.

No work may be permitted until such time that an engineering investigation has been conducted and the cut slope area has been determined to be stable and safe to enter.

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**21.05 WORK DURING HOURS OF DARKNESS**

Cut slopes shall be illuminated whenever employees are required to work during the hours of darkness. The illumination shall be of sufficient power to provide adequate visual protection to detect the possibility of rockfall, slides, or slope movement.

The amount of illumination shall be determined by the supervisor based on each particular work situation. The supervisor shall review the scope of the operation, type of natural rock and/or soil material, and the amount and type of equipment involved. Vehicular headlights, spotlight, or more extensive lighting such as portable lights shall be considered.

**21.06 INSPECTIONS DURING ROUTINE MAINTENANCE OPERATIONS**

Whenever employees conduct routine roadway inspections for the purpose of rockfall and/or snow removal they should also make a visual inspection of cut slope areas as they drive by. The purpose of the visual inspection is to detect the amount of rockfall and debris on the roadway and the condition of a cut slope area.

Any amount of rockfall or debris on the roadway should be reported to the supervisor who shall then make a decision to conduct a drive-by visual inspection to determine if a cut slope is stable or unstable.

If a "moving operation" is going to be performed in a cut slope area, the supervisor shall conduct an advance visual inspection of the cut slope and near-by area. The inspection shall be made to ensure that the slope is stable and the moving operation can be performed without fear of rockfall or other debris obstructing the work.

Personnel involved in moving operations in known and active rockfall/slide areas shall maintain radio contact with their radio base station. If radio contact is difficult, occasional visits or telephone calls to the base station is encouraged.

\* \* \* \* \*

JULY 1996

## CUT SLOPE SAFETY

21-6

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### **CUT SLOPE SAFETY**

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- 1. Forms are described in the chapter text under the section number shown.**
- 2. A sample of each form is shown at the end of each referenced chapter number.**
- 3. Many of these forms are offered by the Caltrans Electronic Forms System on the Department's Intranet and are generally the most current version.**
- 4. All forms are subject to change. Contact originating office to verify correctness.**



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